ORDER NO. RD82041987C3

Service Manual

Radio Cassette

RX-F80

FM-AM-FM STEREO RADIO CASSETTE RECORDER

■ SPECIFICATIONS

General:

Power Requirement:	AC; 110~115/115~127/200~220/ 230~250 V, 50/60 Hz Battery; [Amp./Speaker Part] 9 V (six "C" size Flashlight Batteries) (National UM-2 or equivalent) [Tuner/Deck Part] 3 V (two "AA" size Penlight Batteries) (National UM-3 or equivalent) Car battery; with optional car adaptor RP-917
Power Consumption:	13 W (AC only)
Power Output:	Built-in Speaker; 12 W (6 W×2) . . . PMPO 7 W (3.5 W×2) . . . RMS (max) Headphones; 80 mW (40 mW×2) . . . RMS (max)
Speaker:	10 cm (4") PM Dynamic Speaker (3Ω)
Input:	[Amp./Speaker Part] AC IN and DC IN [Tuner/Deck Part] Mic; sensitivity 0.25 mV/applicable microphone impedance 200~600Ω
Output:	[Amp./Speaker Part] Line Out; sensitivity 420 mV/10 kΩ under EXT SP; 3~8Ω Headphones; 8~32Ω [Tuner/Deck Part] Headphones; 32Ω
Dimensions:	[Amp./Speaker Part] 391 mm (W)×126 mm (H)×99 mm (D) ($15\frac{13}{32}\times4\frac{31}{32}\times3\frac{29}{32}$)" [Tuner/Deck Part] 147 mm (W)×88 mm (H)×41.5 mm (D) ($5\frac{25}{32}\times3\frac{15}{32}\times1\frac{5}{8}$)"
Weight:	[Amp./Speaker Part with Tuner/Deck Part] 2.1 kg (4 lb 10 oz) without batteries [Tuner/Deck Part] 430 g (15 oz) without batteries

Radio Section:

Radio Frequency Range:	FM; 88~108 MHz AM; 525~1605 kHz (571~187 m)
Intermediate Frequency:	FM; 10.7 MHz AM; 455 kHz
Sensitivity:	FM; 5μV/50 mW output AM; 100μV/m/50 mW output

Tape Deck Section:

Frequency Range:	60~10,000 Hz (with normal tape) 60~11,000 Hz (with CrO_2 tape)
Recording system:	AC bias, MAGNET erase
Tape Speed:	4.8 cm/s, ($1\frac{7}{8}$ ips)
Wow and Flutter:	0.3% (WRMS)
Program Time:	1 hour with C-60 cassette tape
Track System:	4-track 2 channel stereo recording and playback

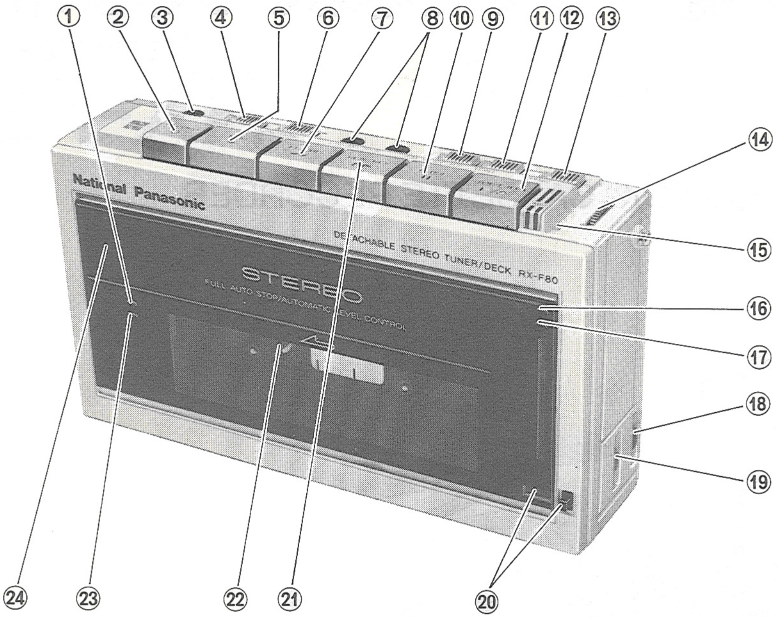
Specifications are subject to change without notice.

National Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka, Japan

LOCATION OF CONTROLS AND COMPONENTS

■ TUNER/DECK PART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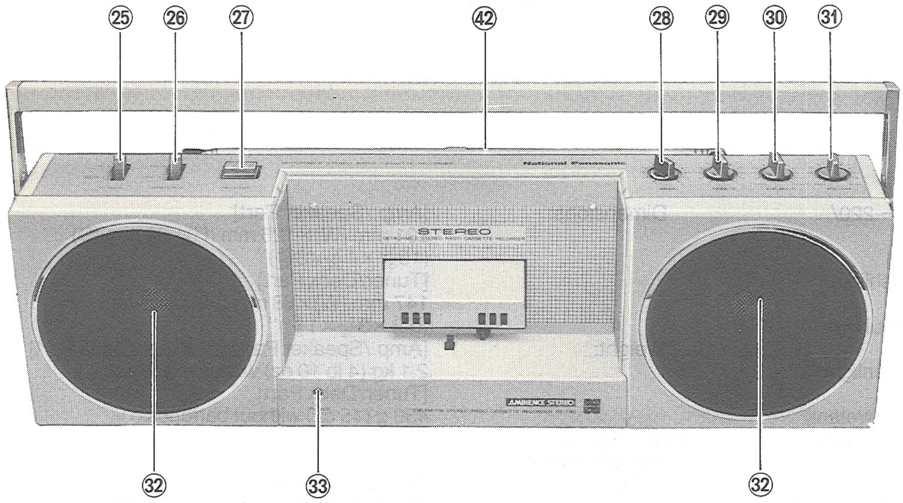
National Panasonic
DETACHABLE STEREO TUNER/DECK RX-F80
STEREO
FULL AUTO STOP/AUTOMATIC LEVEL CONTROL

■ AMP/SPEAKER PART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National Panasonic
STEREO
AMBIENCE STEREO
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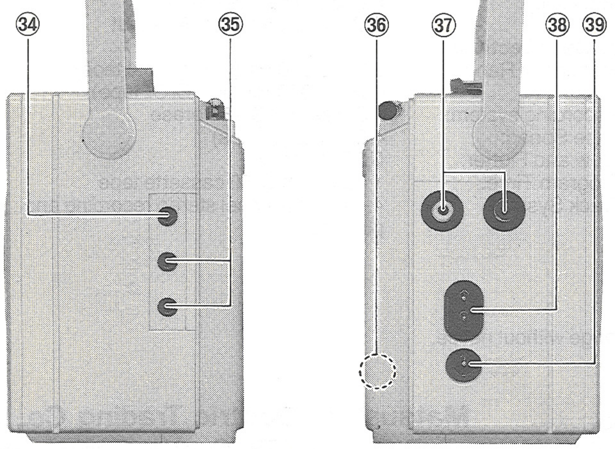
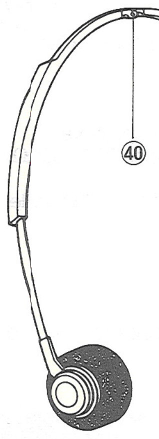




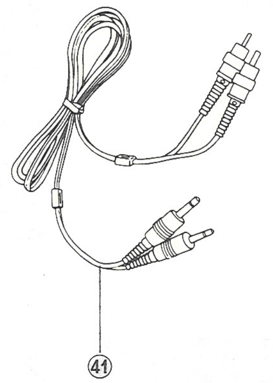


Fig. 1

- ① Recording Indicator (RECORD)
- ② Record Button (RECORD)
- ③ Headphone Jack (PHONES) 32Ω P.B.
- ④ Tape Selector (TAPE)(NORMAL/METAL)
- ⑤ Playback Button (PLAY)
- ⑥ Function Selector (SELECTOR)(TAPE/RADIO)
- ⑦ Fast Forward/Cue Button (FF/CUE)
- ⑧ Microphone Jacks (MIC)(L, R) (0.25 mV, IMP 200~600Ω)
- ⑨ FM Mode Selector/Beat Proof Switch (FM MODE/BEAT PROOF)(MONO II/ST I)
- ⑩ Pause Button (PAUSE)
- ⑪ Tone Selector (TONE)(LOW/HIGH)
- ⑫ Stop/Eject Button (STOP/EJECT)
- ⑬ Band Selector (BAND)(FM/AM)
- ⑭ Tuning Control (TUNING)
- ⑮ Built-in Microphone (MIC)
- ⑯ Tuning Indicator (TUNING)
- ⑰ FM Stereo Indicator (FM STEREO)
- ⑱ Balance Control (BAL)
- ⑲ Volume Control (VOL)
- ⑳ Tape Counter and Reset Button (COUNTER)
- ㉑ Rewind/Review Button (REW/REV)
- ㉒ Cassette Compartment
- ㉓ Battery Indicator (BATTERY)
- ㉔ Battery Compartment (inside the Cassette Compartment)
- ㉕ Power Switch (POWER)(ON/OFF)
- ㉖ Ambience Switch (AMBIENCE)(ON/OFF)
- ㉗ Release Button (RELEASE)
- ㉘ Bass Control (BASS)
- ㉙ Treble Control (TREBLE)
- ㉚ Balance Control (BALANCE)
- ㉛ Volume Control (VOLUME)
- ㉜ Built-in Speaker 10 cm (4")(3Ω)
- ㉝ Power Indicator (POWER)
- ㉞ Headphone Jack (PHONES) 8~32Ω
- ㉟ External Speaker Jacks (L, R) (EXT SP ◁ IMP 3–8Ω)
- ㊱ Voltage Selector Switch (VOLTAGE SELECTOR)
- ㊲ Line Output Jacks (LINE OUT) 420 mV/10 kΩ Under
- ㊳ AC Socket (AC IN ~)
- ㊴ DC Input Jack (DC IN 9 V⊖-⊙-⊕)
- ㊵ Exclusive Stereo Headphones
- ㊶ Line-in Cord
- ㊷ Telescopic Antenna

DISASSEMBLY INSTRUCTIONS

■ TUNER/DECK PART

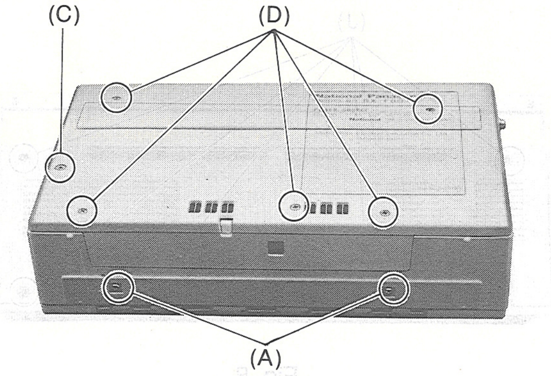


Fig. 2

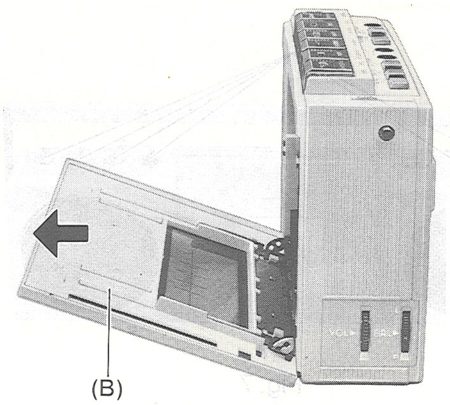


Fig. 3

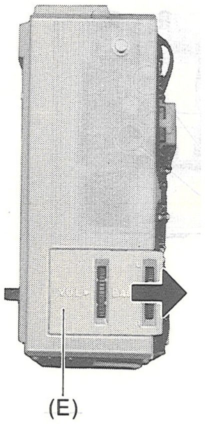


Fig. 4

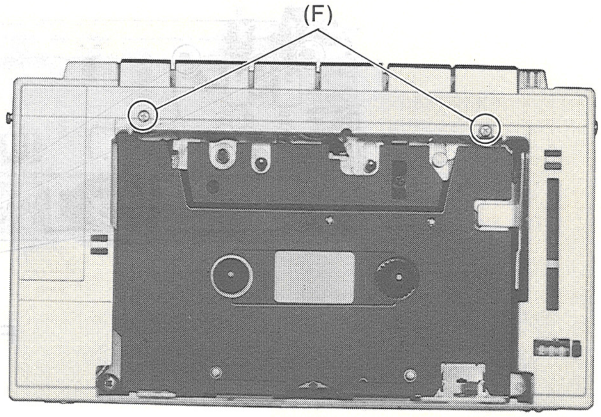


Fig. 5

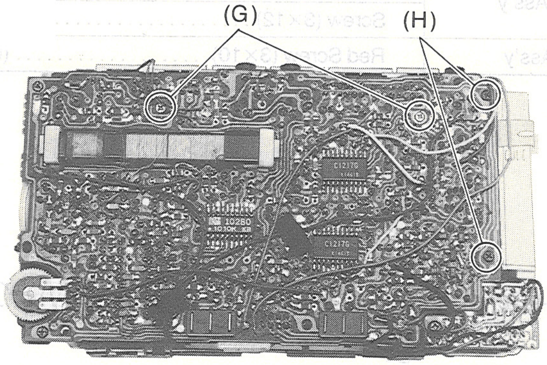


Fig. 6

Procedure	To remove—.	Remove—.	Shown in Fig.—.
1	Cassette Cover Ass'y	Screw (2×3) .... (A)×2	2
2		Remove the cassette cover ass'y in the direction of arrow .... (B)×1	3
3	Rear Cabinet Ass'y *1	Screw (2×8) .... (C)×1	2
4		Screw (2×8) .... (D)×5	2
5	Front Cabinet Ass'y	Remove the ornament in the direction of arrow .... (E)×1	4
6		Screw (1.7×4) .... (F)×2	5
7	Circuit Board	Screw (2×4) .... (G)×2	6
8		Screw (2×4) .... (H)×2	6

*1. To reassemble, reverse the above procedure and set the selectors (switch) as follows.
TAPE→NORMAL, FUNCTION→TAPE, MODE/BEAT PROOF→MONO/II, TONE→LOW, BAND→FM

■ AMP/SPEAKER PART

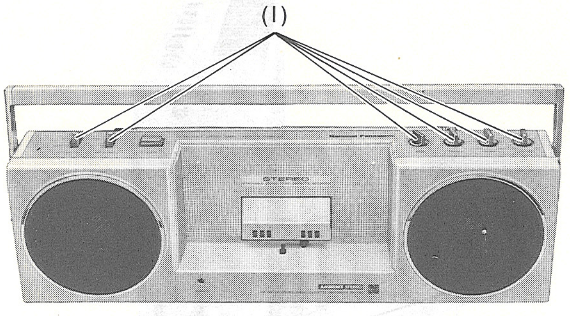


Fig. 7

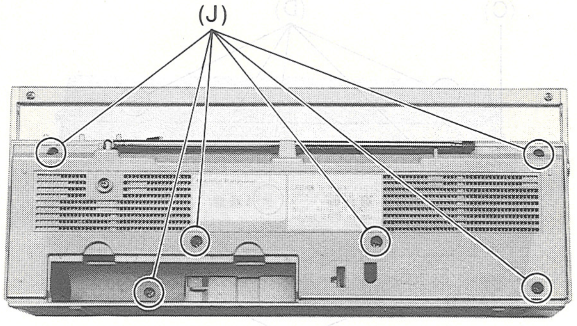


Fig. 8

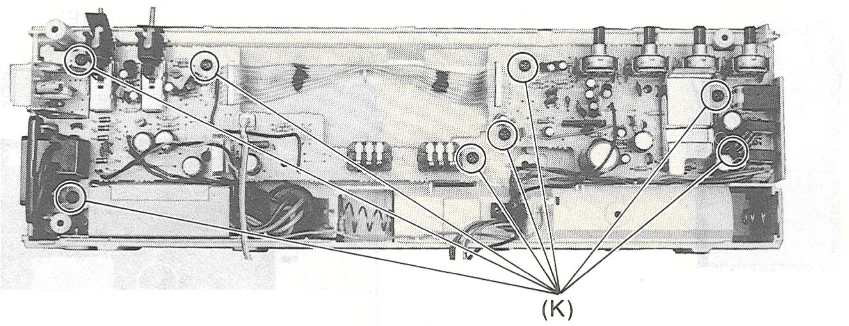
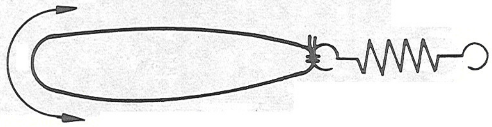


Fig. 9

Procedure	To remove—.	Remove—.	Shown in Fig.—.
1	Front Cabinet Ass'y	Knob .... (I)×6	7
2		Screw (3×12) .... (J)×6	8
3	Circuit Board Ass'y	Red Screw (3×10) .... (K)×8	9

DIAL THREADING

Cord length, 116.5±1 mm (4-9/16")



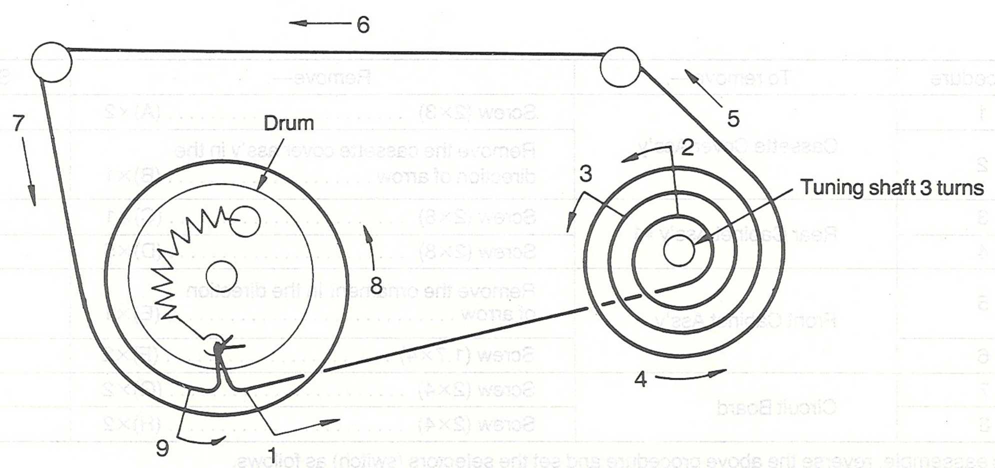

6
7
Drum
5
2
3
Tuning shaft 3 turns
8
4
9
1

Fig. 10

MEASUREMENTS AND ADJUSTMENTS

■ ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

1. Set volume control to maximum.
2. Set Balance control to center.
3. Set tone switch to high.
4. Set band switch to AM or FM.
5. Set tape/radio selector to radio.
6. Set power source voltage to 3 V DC.
7. Output of signal generator should be no higher than necessary to obtain an output reading.

■ AM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
AM-IF ALIGNMENT							
(1)	AM	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455 kHz 30% Mod. at 400 Hz	Point of non-interference. (on/ about 600 kHz)	Output meter across voice coil.	T2 (AM IFT)	Adjust for maximum output.
AM-RF ALIGNMENT							
(2)	AM	,,	550 kHz	550 kHz [2.8 mm (1/8")]	Output meter across voice coil.	L4 (AM OSC Coil) (*1) L3 (AM ANT Coil)	Adjust for maximum output. Adjust L3 by moving coil bobbin along ferrite core.
(3)	AM	,,	1,500 kHz	1,500 kHz [25.4 mm (1")]	,,	CT2 (AM OSC Trimmer) CT1 (AM ANT Trimmer)	Adjust for maximum output. Repeat steps (2) and (3).

(*1) Cement antenna bobbin with wax after completing alignment.

■ FM ALIGNMENT

	BAND	SIGNAL GENERATOR or SWEEP GENERATOR		RADIO DIAL SETTING	INDICATOR (ELECTRONICS VOLTMETER or SCOPE)	ADJUSTMENT	REMARKS
		CONNECTIONS	FREQUENCY				
FM-IF ALIGNMENT							
(1)	FM	Connect to test point ▼2 through 0.001 μF. Negative side to test point ▼5.	10.7 MHz (SWP.)	Point of non-interference. (on/ about 90 MHz)	Connect vert. amp. of scope to test point ▼4. Negative side to test point ▼5.	T1 (FM 1st IFT)	Adjust for maximum amplitude. (Refer to fig. 11.)
(2)	FM	,,	,,	,,	,,	T3 (FM 2nd IFT)	Adjust for maximum amplitude. (Refer to fig. 12.)
FM-RF ALIGNMENT							
(3)	FM	Connect to test point ▼1 through FM dummy antenna. Negative side to test point ▼5.	90 MHz	90 MHz [4.0 mm (5/32")]	Output meter across voice coil.	L2 (FM OSC Coil) L1 (FM ANT Coil)	(*2) Adjust for maximum output.
(4)	FM		106 MHz	106 MHz [24.0 mm (3 15/16")]	,,	CT4 (FM OSC Trimmer) CT3 (FM ANT Trimmer)	(*2) Adjust for maximum output. Repeat steps (3)~(4).

(*2) Three output responses will be present; proper tuning is the center frequency.

■ SEPARATION ALIGNMENT

ITEM	FM SIGNAL GENERATOR SOURCE CONNECTION	EQUIPMENT CONNECTION ELECTRONIC COUNTER	ADJUSTMENT	SPECIFICATION	REMARKS
Adjustment of pilot signal.	90 MHz, 60 dB (CW)	▼6 ... (+) ▼7 ... (−)	VR1	19 kHz	Adjust VR1, for 19 kHz (±50 Hz) reading on electronics counter.

■ AUDIO ADJUSTMENT

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Azimuth	QZZCFM (8 kHz, −20 dB)	EXT SP	Maximum output.	Azimuth screw	Playback mode
Bias oscillation frequency	———	▼101 ... (L) (+) ▼102 ... (−) ▼201 ... (R) (+) ▼202 ... (−)	54±0.5 kHz	L7	Record mode Function selector to Radio Tape selector→Normal
Bias current	———	▼101 ... (L) (+) ▼102 ... (−) ▼201 ... (R) (+) ▼202 ... (−)	2.3~3.3 mV	VR2	Record mode Function selector to Tape Tape selector→Normal

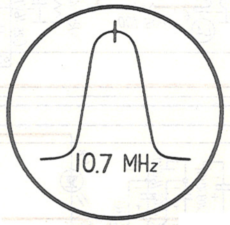


Fig. 11

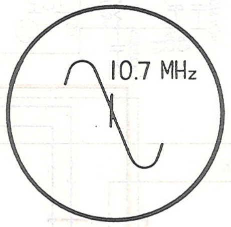


Fig. 12

■ ALIGEMENT POINTS

Note: Please refer to Circuit Board wiring View in which test point are located.

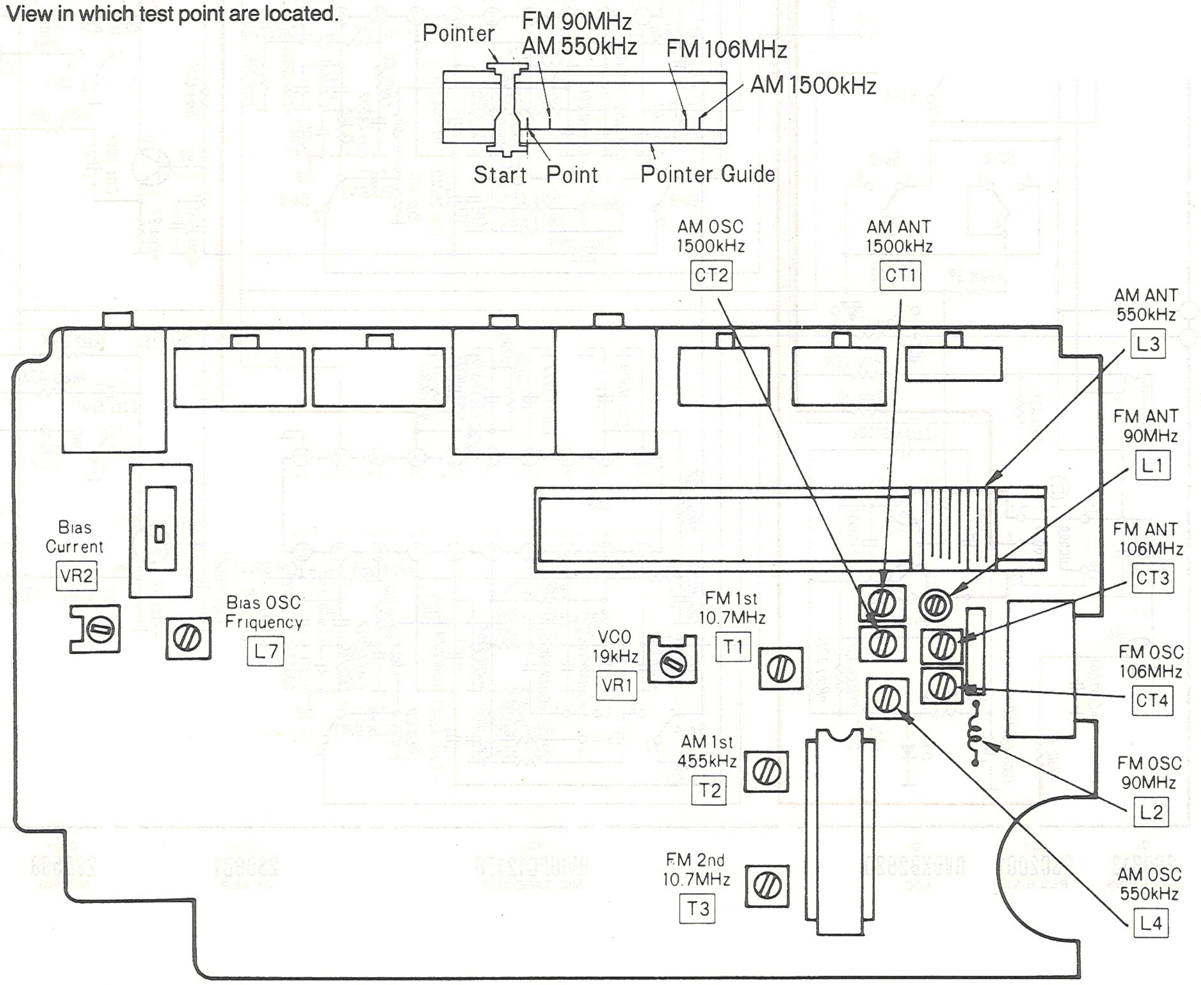
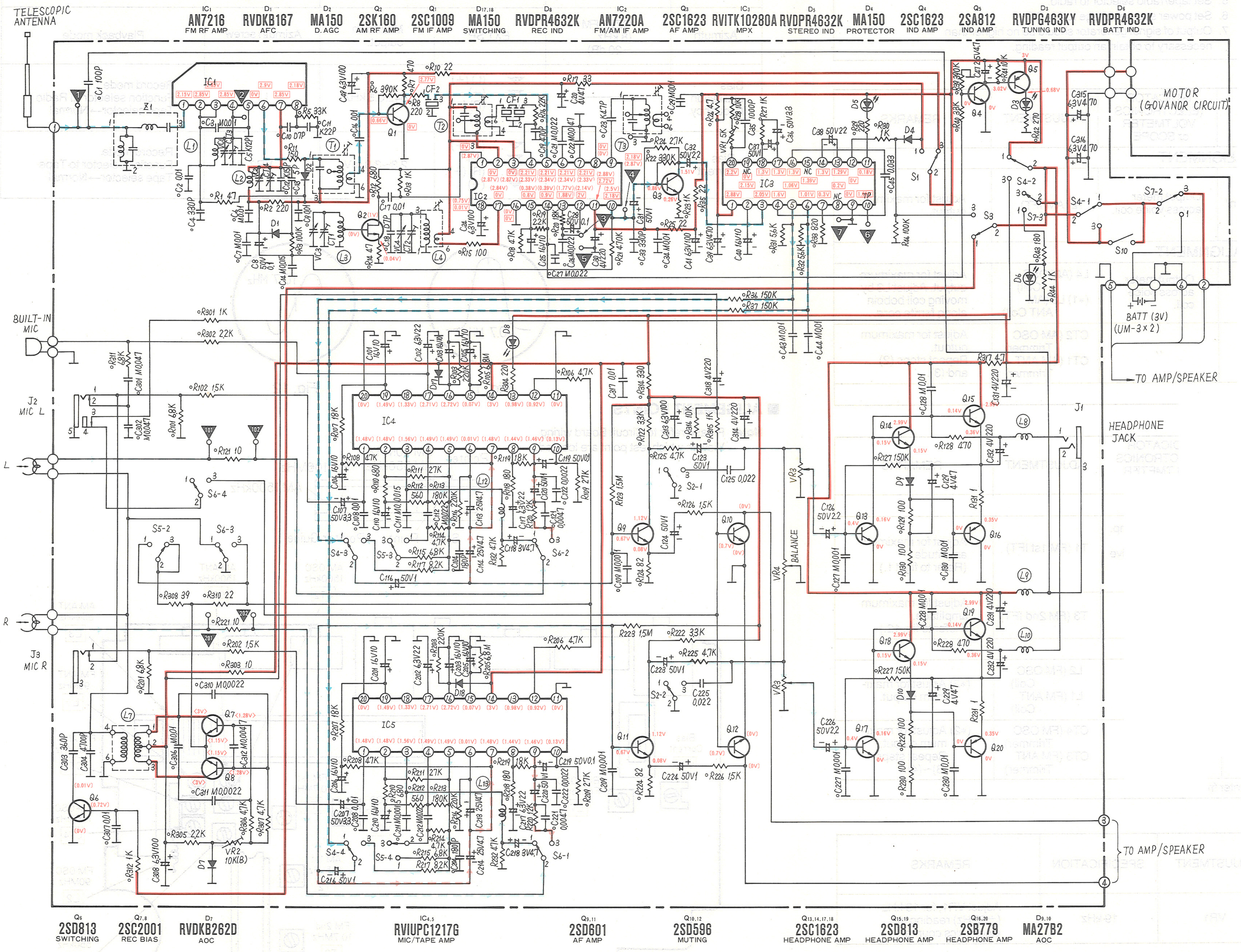


Fig. 13

SCHEMATIC DIAGRAM MODEL RX-F80 (TUNER/DECK PART)


IC1 AN7216 FM RF AMP
D1 RVDKB167 AFC
D2 MA150 D. AGC
Q2 2SK160 AM RF AMP
Q1 2SC1009 FM IF AMP
D17,18 MA150 SWITCHING
D8 RVDPR4632K REC IND
IC2 AN7220A FM/AM IF AMP
Q3 2SC1623 AF AMP
IC3 RVITK10280A MPX
D5 RVDPR4632K STEREO IND
D4 MA150 PROTECTOR
Q4 2SC1623 IND AMP
Q5 2SA812 IND AMP
D3 RVDPG463KY TUNING IND
D6 RVDPR4632K BATT IND
TELESCOPIC ANTENNA
MOTOR (GOVANOR CIRCUIT)
BATT (3V) (UM-3×2)
BUILT-IN MIC
J2 MIC L
J3 MIC R
L
R
IC4
IC5
HEADPHONE JACK
J1
BALANCE
TO AMP/SPEAKER
TO AMP/SPEAKER
Q6 2SD813 SWITCHING
Q7,8 2SC2001 REC BIAS
D7 RVDKB262D AOC
IC4,5 RVIUPC1217G MIC/TAPE AMP
Q9,11 2SD601 AF AMP
Q10,12 2SD596 MUTING
Q13,14,17,18 2SC1623 HEADPHONE AMP
Q15,19 2SD813 HEADPHONE AMP
Q16,20 2SB779 HEADPHONE AMP
D9,10 MA27B2 AOC

━ ⊕ Voltage Line

➡ Radio (FM) Signal Line

➡ Tape (Playback) Signal Line

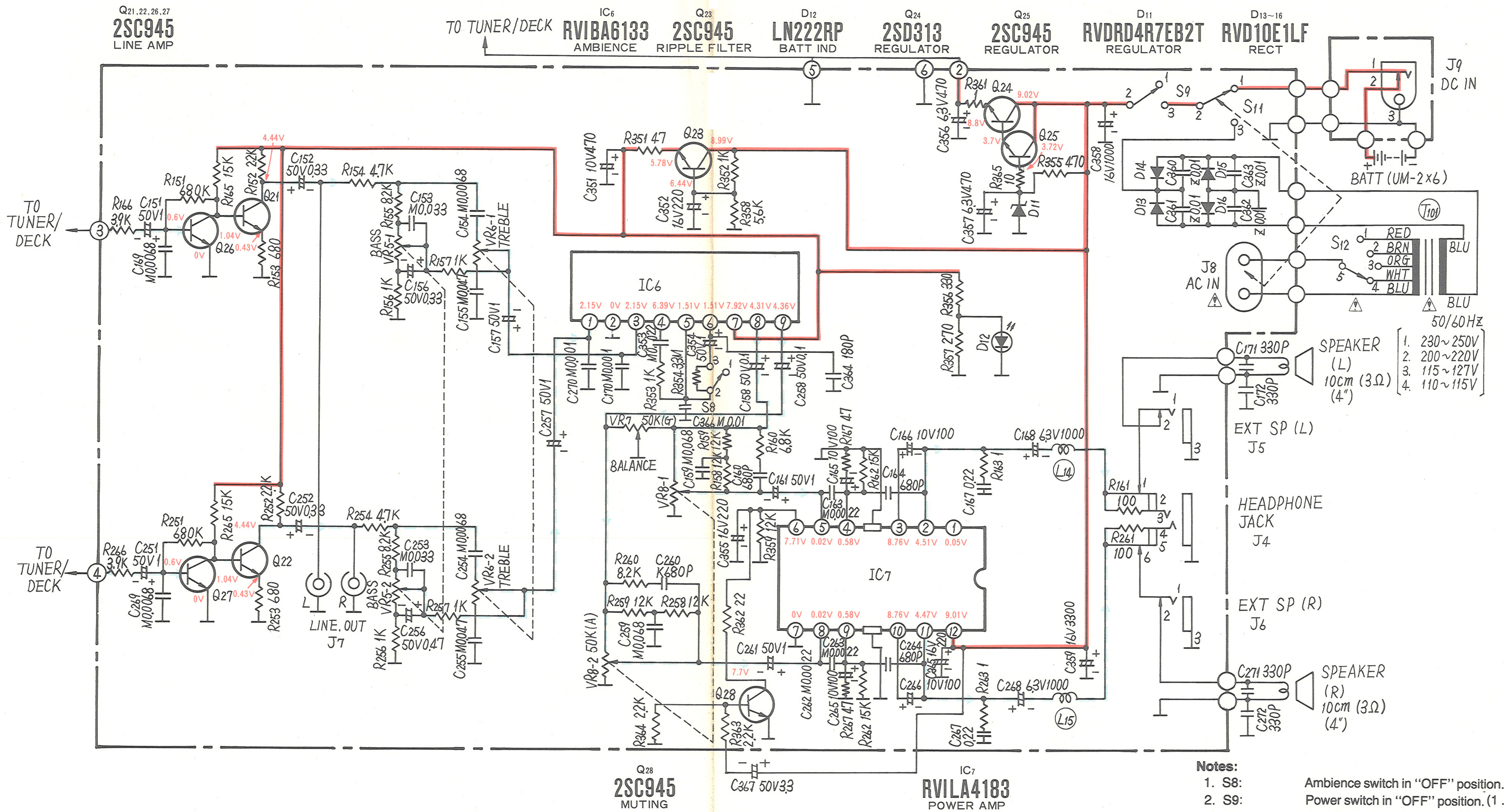
➡ Tape (Record) Signal Line

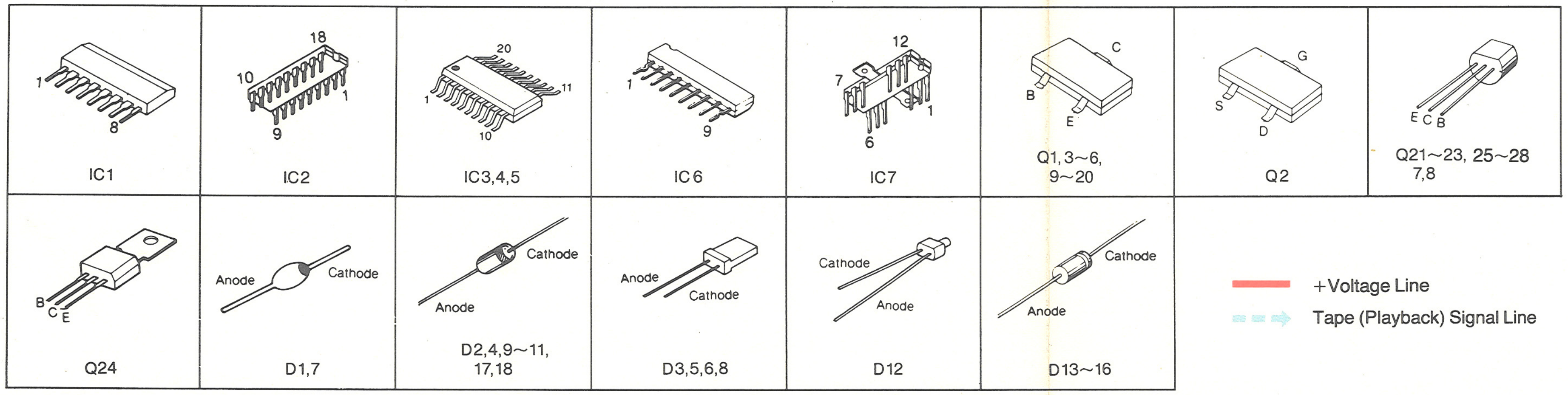
Notes:

1. S1: Band switch in "FM" position.
(1 . . . AM, 3 . . . FM)
2. S2-1, S2-2: Tone switch in "High" position.
(1 . . . High, 3 . . . Low)
3. S3: Mode/beat proof switch in "STEREO/I" position.
(1 . . . STEREO/I, 3 . . . MONO/II)
4. S4-1~S4-4: Function switch in "RADIO" position.
(1 . . . RADIO, 3 . . . TAPE/OFF)
5. S5-2~S5-4: Tape select switch in "NORMAL" position.
(1 . . . METAL, 3 . . . NORMAL)
6. S6-1~S6-4: Record/playback switch in "playback" position.
(1 . . . Playback, 3 . . . Recording)
7. S7-2, S7-4: Power select switch in "ON" position.
(1 . . . OFF, 3 . . . ON)
8. S10: Motor ON/OFF switch in "OFF" position.
9. VR1: VCO oscillator frequency adjust VR.
10. VR2: Bias current adjustment VR.
11. VR3: Volume control.
12. VR4: Balance control.
13. The mark (▼) shows test point e.g. ▼ =test point 1.
14. DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
☐ . . . FM position, (   ) . . . AM position,
<   > . . . Playback position, [   ] . . . Recording position.
15. Battery current: No signal . . . . 87 mA (TUNER/DECK)
Maximum output (radio) . . . . 104 mA (TUNER/DECK)
Maximum output (tape) . . . . 212 mA (TUNER/DECK)
16. For resistors and capacitors, using chips except ○ mark.

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM MODEL RX-F80 (TUNER/DECK PART)

SCHEMATIC DIAGRAM MODEL RX-F80 (AMP/SPEAKER PART)


Q21,22,26,27
2SC945
LINE AMP
TO TUNER/DECK
IC6
RVIBA6133
AMBIENCE
Q23
2SC945
RIPPLE FILTER
D12
LN222RP
BATT IND
Q24
2SD313
REGULATOR
Q25
2SC945
REGULATOR
D11
RVDRD4R7EB2T
REGULATOR
D13~16
RVD10E1LF
RECT
J9
DC IN
S9
S11
BATT (UM-2×6)
T101
S12
RED
BRN
ORG
WHT
BLU
BLU
BLU
J8
AC IN
50/60Hz
1. 230~250V
2. 200~220V
3. 115~127V
4. 110~115V
TO TUNER/DECK
R166 3.9K
C151 50V1
R151 680K
R165 15K
R152 2.2K
Q21
Q26
C169 M0.068
R153 680
C152 50V0.33
R154 4.7K
R155 8.2K
C153 M0.033
BASS VR5-1
R157 1K
C154 M0.0068
VR6-1 TREBLE
C156 50V0.33
R156 1K
C155 M0.047
C157 50V1
C351 10V470
R351 4.7
Q23
R352 1K
C352 16V220
R358 5.6K
C356 6.3V470
R361
Q24
Q25
R355 470
R365 10
C357 6.3V470
D11
C358 16V1000
D14
C360 Z0.01
D15
C363 Z0.01
D13
C361 Z0.01
D16
C362 Z0.01
IC6
C270 M0.001
C170 M0.001
C352
R353 1K
R354 3.3K
C354 50V1
S8
C158 50V0.1
C258 50V0.1
C364 180P
R356 330
R357 270
D12
VR7 50K(G)
C344 M0.01
BALANCE
VR8-1
C159 M0.068
R159 12K
R158 12K
C160 680P
R160 6.8K
C161 50V1
C165 10V100
R167 4.7
C166 10V100
C164 680P
R162 15K
C163 M0.022
C167 0.22
R163 1
C168 6.3V1000
L14
C257 50V1
C355 16V220
R351 12K
IC7
R260 8.2K
C260 K680P
R259 12K
R258 12K
C259 M0.068
R262 22
C261 50V1
C262 M0.022
C263 M0.022
C265 10V100
R267 4.7
R262 15K
C264 680P
C265 16V220
C266 10V100
R263 1
C268 6.3V1000
L15
C359 16V3300
C267 0.22
VR8-2 50K(A)
R364 2.2K
Q28
R363 2.2K
C367 50V3.3
TO TUNER/DECK
R266 3.9K
C251 50V1
R251 680K
R265 15K
R252 2.2K
C252 50V0.33
Q22
Q27
C269 M0.068
R253 680
L
R
LINE OUT
J7
R254 4.7K
R255 8.2K
C253 M0.033
BASS VR5-2
R257 1K
C254 M0.0068
VR6-2 TREBLE
C256 50V0.47
R256 1K
C255 M0.047
C171 330P
C172 330P
SPEAKER (L) 10cm (3Ω) (4")
EXT SP (L)
J5
R161 100
R261 100
HEADPHONE JACK
J4
EXT SP (R)
J6
C271 330P
C272 330P
SPEAKER (R) 10cm (3Ω) (4")
Q28
2SC945
MUTING
IC7
RVILA4183
POWER AMP
4.44V
0.6V
1.04V
0.43V
0V
9.02V
9.8V
3.7V
3.72V
8.99V
5.78V
6.44V
2.15V 0V 2.15V 6.39V 1.51V 1.51V 7.92V 4.31V 4.36V
7.71V 0.02V 0.58V 8.76V 4.51V 0.05V
0V 0.02V 0.58V 8.76V 4.47V 9.01V
7.7V


IC1
IC2
IC3,4,5
IC6
IC7
Q1,3~6, 9~20
Q2
Q21~23, 25~28 7,8
Q24
D1,7
D2,4,9~11, 17,18
D3,5,6,8
D12
D13~16
Anode
Cathode
B
C
E
G
S
D

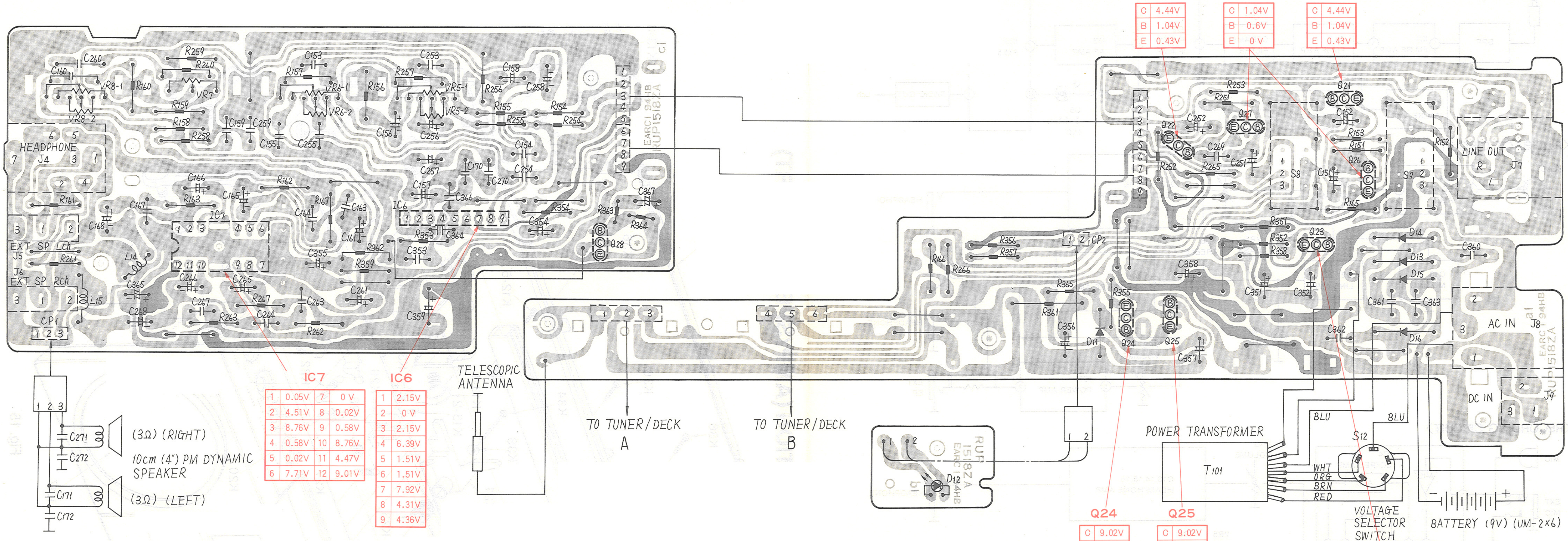
🟥 +Voltage Line

- - ➡ Tape (Playback) Signal Line

Notes:

1. S8: Ambience switch in "OFF" position. (1 . . OFF, 3 . . ON)
2. S9: Power switch in "OFF" position. (1 . . . OFF, 3 . . . ON)
3. S11: AC/DC IN select switch in "DC IN" position.
4. S12: Voltage select switch.
5. VR5: Bass control.
6. VR6: Treble control.
7. VR7: Balance control.
8. VR8: Volume control.
9. DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
10. Battery current: No signal . . . . 110 mA
    (TUNER/DECK IN SET)
    Maximum output (radio) 1A
    (TUNER/DECK IN SET)
    Maximum output (tape) 1.06A
    (TUNER/DECK IN SET)
11. Important safety notice
    Components identified by ⚠ mark have special characteristics. important for safety.
    When replacing any of these components, use only manufacturer's specified parts.

CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM MODEL RX-F80 (AMP/SPEAKER PART)


HEADPHONE J4
EXT SP Lch J5
J6 EXT SP Rch
CP1
IC7
IC6
Q28
EARC1 94HB RUP1518ZA
TELESCOPIC ANTENNA
TO TUNER/DECK A
TO TUNER/DECK B
(3Ω) (RIGHT)
10cm (4") PM DYNAMIC SPEAKER
(3Ω) (LEFT)
C271
C272
C171
C172
RUP1518ZA EARC 94HB
D12
CP2
Q21
Q22
Q23
Q24
Q25
Q26
Q27
S8
S9
LINE OUT R L J7
AC IN J8
DC IN J9
POWER TRANSFORMER
T101
WHT
ORG
BRN
RED
BLU
S12
VOLTAGE SELECTOR SWITCH
BATTERY (9V) (UM-2×6)

Q22

C	4.44V
B	1.04V
E	0.43V

Q26,27

C	1.04V
B	0.6V
E	0 V

Q21

C	4.44V
B	1.04V
E	0.43V

IC7

1	0.05V	7	0 V
2	4.51V	8	0.02V
3	8.76V	9	0.58V
4	0.58V	10	8.76V
5	0.02V	11	4.47V
6	7.71V	12	9.01V

IC6

1	2.15V
2	0 V
3	2.15V
4	6.39V
5	1.51V
6	1.51V
7	7.92V
8	4.31V
9	4.36V

Q24

C	9.02V
B	3.7V
E	8.8V

Q25

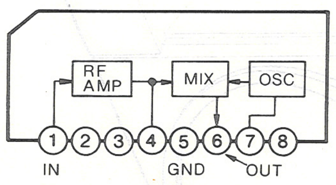
C	9.02V
B	3.72V
E	3.7V

Q23

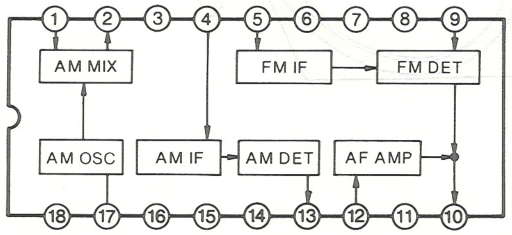
C	8.99V
B	6.44V
E	5.78V

IC BLOCK DIAGRAM

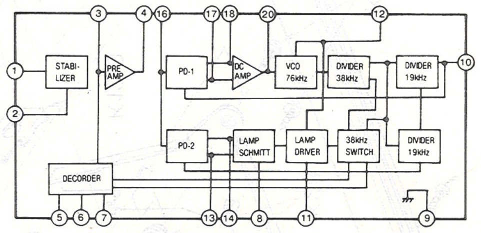
IC1 AN7216


RF AMP
MIX
OSC
IN
GND
OUT

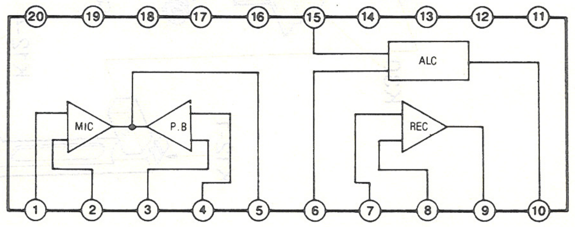
IC2 AN7220A


AM MIX
FM IF
FM DET
AM OSC
AM IF
AM DET
AF AMP

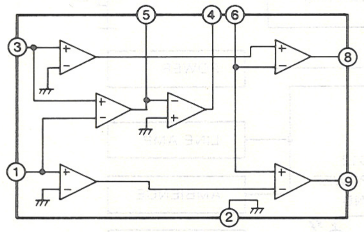
IC3 RVITK10280A


STABILIZER
PRE AMP
PD-1
DC AMP
VCO 76kHz
DIVIDER 38kHz
DIVIDER 19kHz
PD-2
LAMP SCHMITT
LAMP DRIVER
38kHz SWITCH
DIVIDER 19kHz
DECORDER

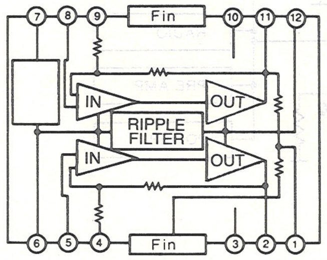
IC4,5 RVIUPC1217G


MIC
P.B
ALC
REC

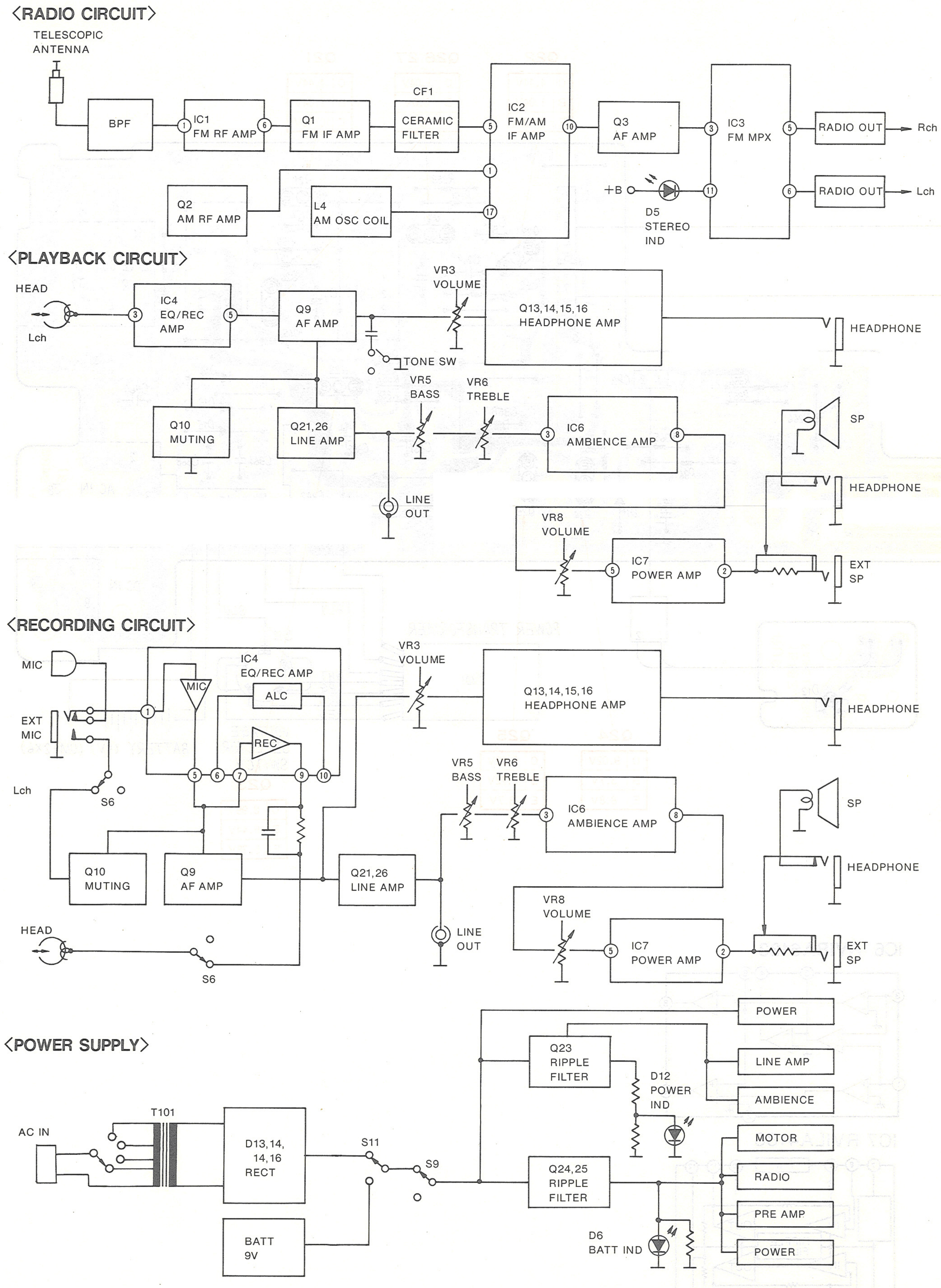
IC6 RVIBA6133



IC7 RVILA4183


Fin
IN
OUT
RIPPLE FILTER
IN
OUT
Fin

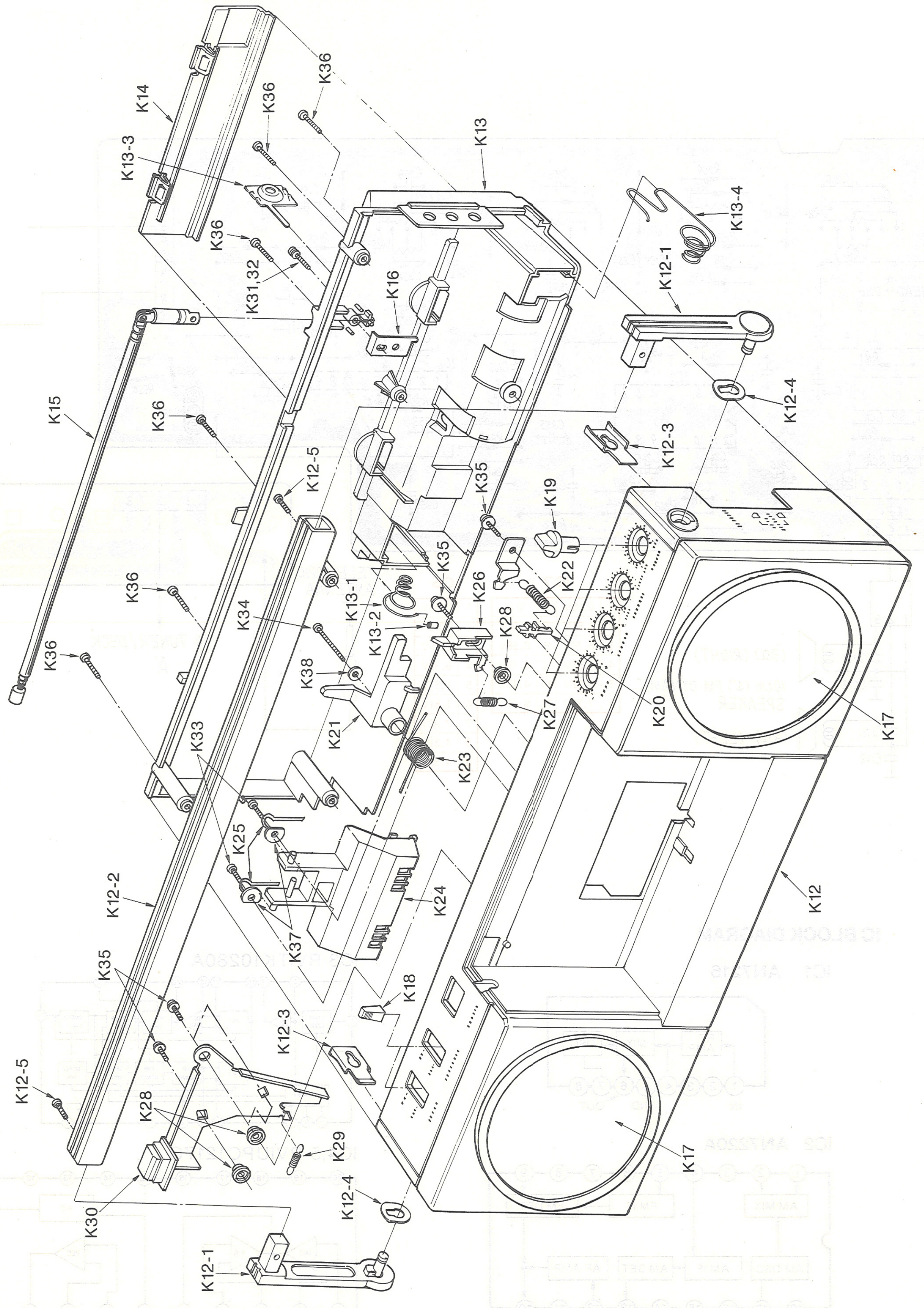
BLOCK DIAGRAM



〈RADIO CIRCUIT〉
TELESCOPIC ANTENNA
BPF
IC1 FM RF AMP
Q1 FM IF AMP
CF1
CERAMIC FILTER
IC2 FM/AM IF AMP
Q3 AF AMP
IC3 FM MPX
RADIO OUT
Rch
RADIO OUT
Lch
Q2 AM RF AMP
L4 AM OSC COIL
+B
D5 STEREO IND
〈PLAYBACK CIRCUIT〉
HEAD
Lch
IC4 EQ/REC AMP
Q9 AF AMP
VR3 VOLUME
Q13,14,15,16 HEADPHONE AMP
HEADPHONE
TONE SW
VR5 BASS
VR6 TREBLE
Q10 MUTING
Q21,26 LINE AMP
IC6 AMBIENCE AMP
SP
HEADPHONE
LINE OUT
VR8 VOLUME
IC7 POWER AMP
EXT SP
〈RECORDING CIRCUIT〉
MIC
EXT MIC
IC4 EQ/REC AMP
MIC
ALC
REC
Lch
S6
VR3 VOLUME
Q13,14,15,16 HEADPHONE AMP
HEADPHONE
VR5 BASS
VR6 TREBLE
IC6 AMBIENCE AMP
SP
Q10 MUTING
Q9 AF AMP
Q21,26 LINE AMP
HEADPHONE
HEAD
S6
LINE OUT
VR8 VOLUME
IC7 POWER AMP
EXT SP
〈POWER SUPPLY〉
AC IN
T101
D13,14, 14,16 RECT
S11
S9
BATT 9V
Q23 RIPPLE FILTER
D12 POWER IND
Q24,25 RIPPLE FILTER
D6 BATT IND
POWER
LINE AMP
AMBIENCE
MOTOR
RADIO
PRE AMP
POWER

Fig. 14

CABINET PARTS LOCATION (AMP/SPEAKER PART)



K14
K36
K36
K13-3
K13
K13-4
K36
K31,32
K16
K12-1
K15
K36
K12-4
K12-3
K12-5
K35
K19
K36
K35
K26
K22
K13-1
K34
K13-2
K28
K36
K38
K21
K27
K20
K17
K33
K23
K25
K12-2
K24
K12
K37
K35
K18
K12-5
K12-3
K28
K29
K30
K17
K12-4
K12-1

Fig. 15

MECHANISM PARTS LOCATION

Specification

Specification	
Tape drive force	60 gr over (without Take-up)
Take-up torque	30~50 gcm
Wow & flutter	Less than 0.3% (WRMS)
Tape speed fluctuation	±3%

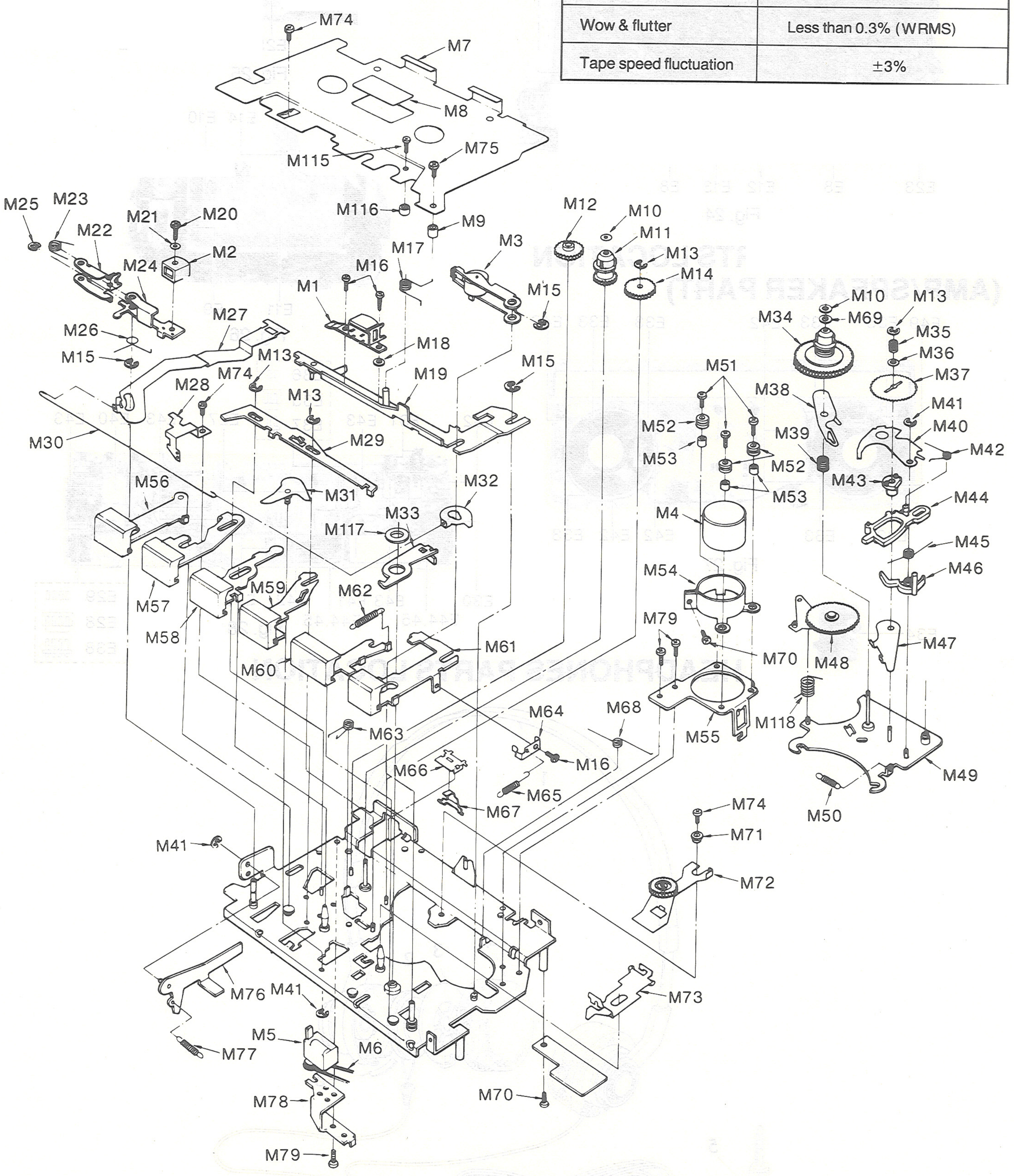

M74
M7
M8
M115
M75
M116
M9
M25
M23
M22
M21
M20
M2
M24
M26
M15
M30
M27
M28
M74
M13
M16
M1
M17
M3
M12
M10
M11
M13
M14
M15
M18
M19
M13
M15
M29
M31
M56
M57
M58
M59
M62
M33
M117
M32
M60
M61
M63
M64
M16
M65
M66
M67
M68
M51
M52
M53
M4
M54
M34
M10
M69
M13
M35
M36
M37
M38
M39
M52
M53
M41
M40
M42
M43
M44
M45
M46
M47
M48
M70
M79
M55
M118
M49
M50
M74
M71
M72
M73
M41
M76
M41
M5
M6
M77
M78
M79
M70

Fig. 16

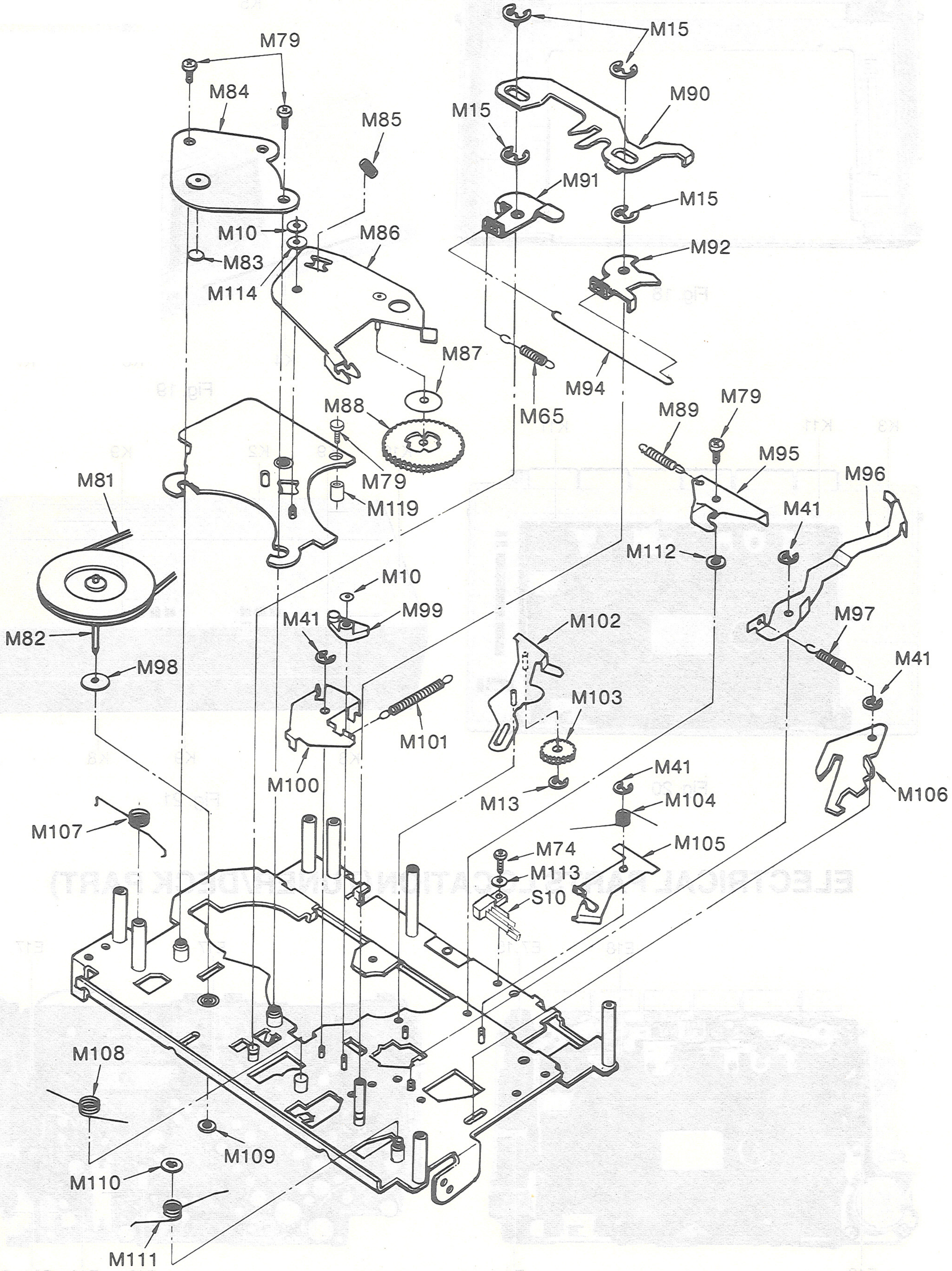

M15
M79
M84
M85
M90
M15
M91
M15
M92
M10
M83
M86
M114
M87
M65
M94
M88
M79
M119
M81
M89
M79
M95
M96
M41
M112
M10
M99
M41
M82
M98
M102
M97
M41
M100
M101
M103
M106
M41
M104
M13
M107
M74
M113
S10
M105
M108
M109
M110
M111

Fig. 17

CABINET PARTS LOCATION (TUNER/DECK PART)

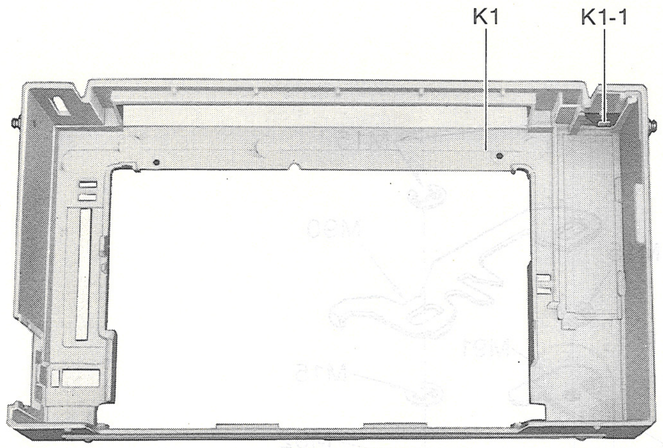


Fig. 18

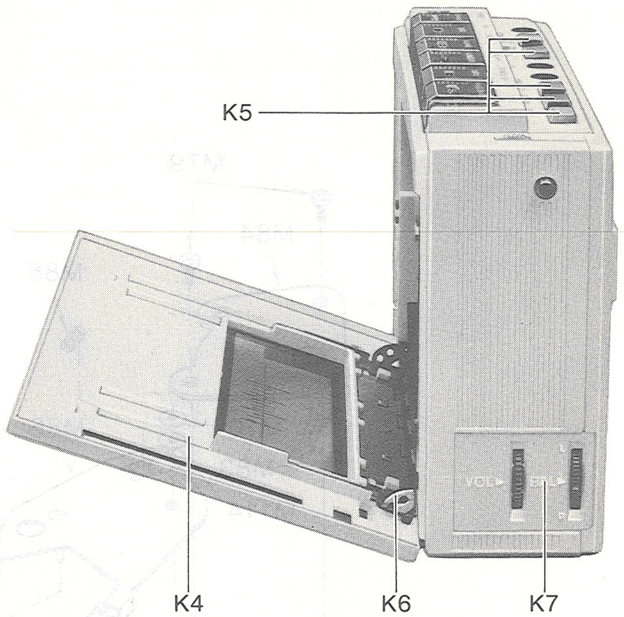


Fig. 19

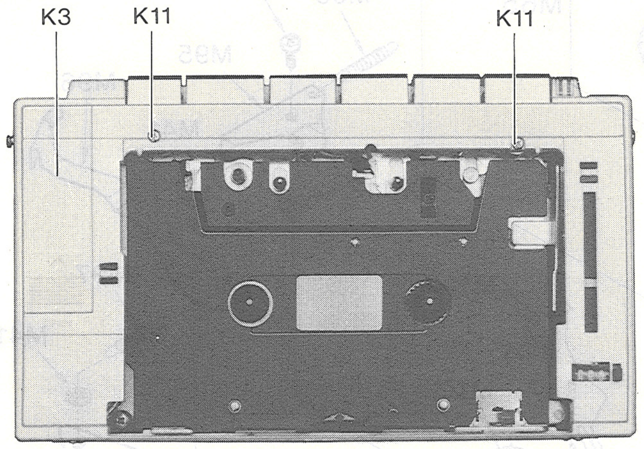


Fig. 20

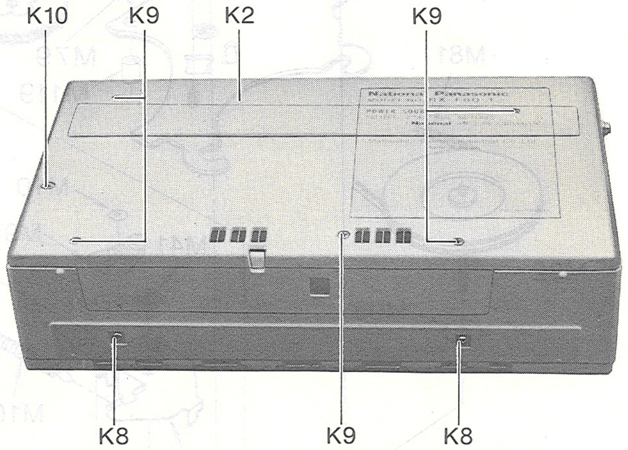

K10
K9
K2
K9
K8
K9
K8

Fig. 21

ELECTRICAL PARTS LOCATION (TUNER/DECK PART)

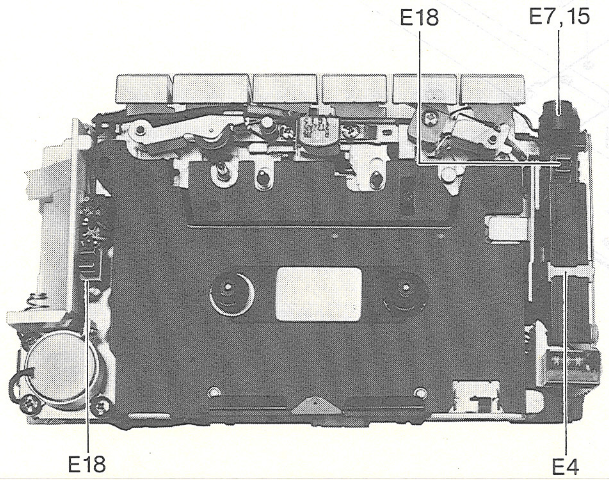

E18
E7,15
E18
E4

Fig. 22

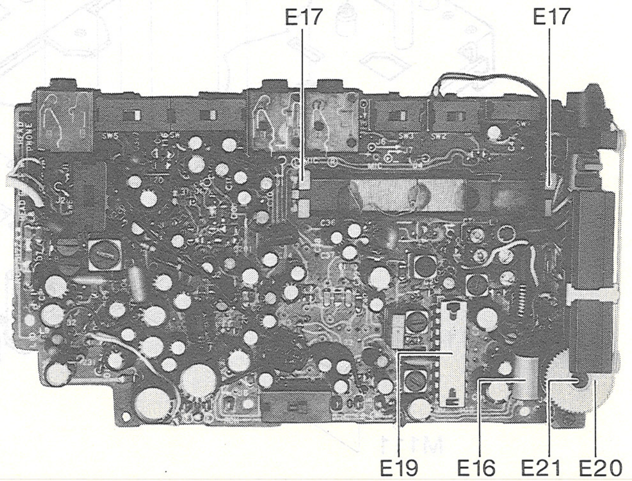

E17
E17
E19
E16
E21
E20

Fig. 23

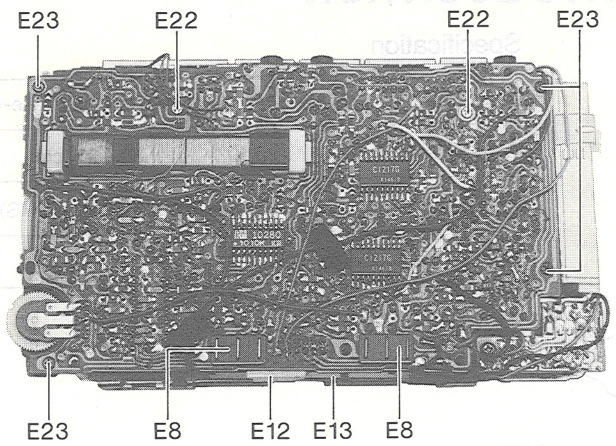

E23
E22
E22
E23
E23
E8
E12
E13
E8

Fig. 24

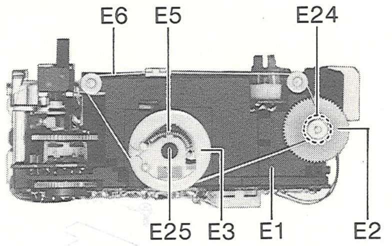

E6
E5
E24
E25
E3
E1
E2

Fig. 25

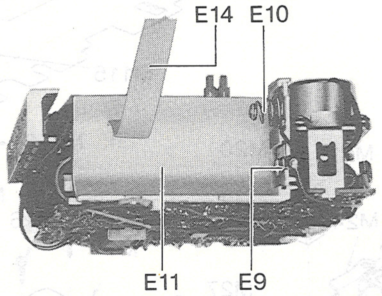

E14
E10
E11
E9

Fig. 26

ELECTRICAL PARTS LOCATION (AMP/SPEAKER PART)

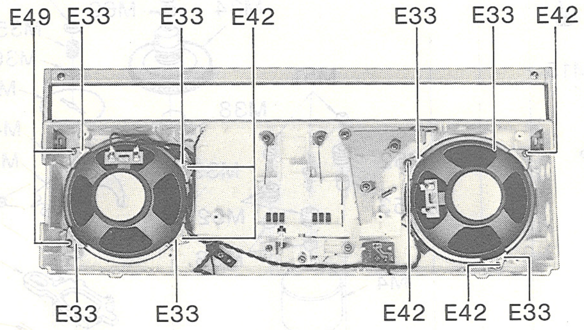
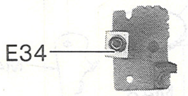

E49
E33
E33
E42
E33
E33
E42
E33
E33
E42
E42
E33

Fig. 27



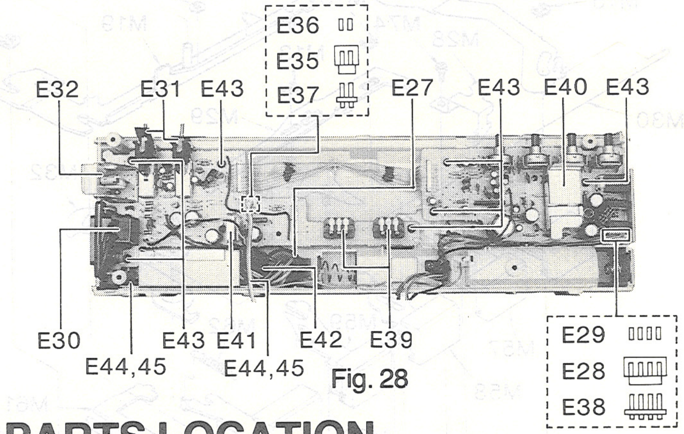

E36
E35
E37
E32
E31
E43
E27
E43
E40
E43
E30
E44,45
E43
E41
E44,45
E42
E39
E29
E28
E38

Fig. 28

HEADPHONES PARTS LOCATION

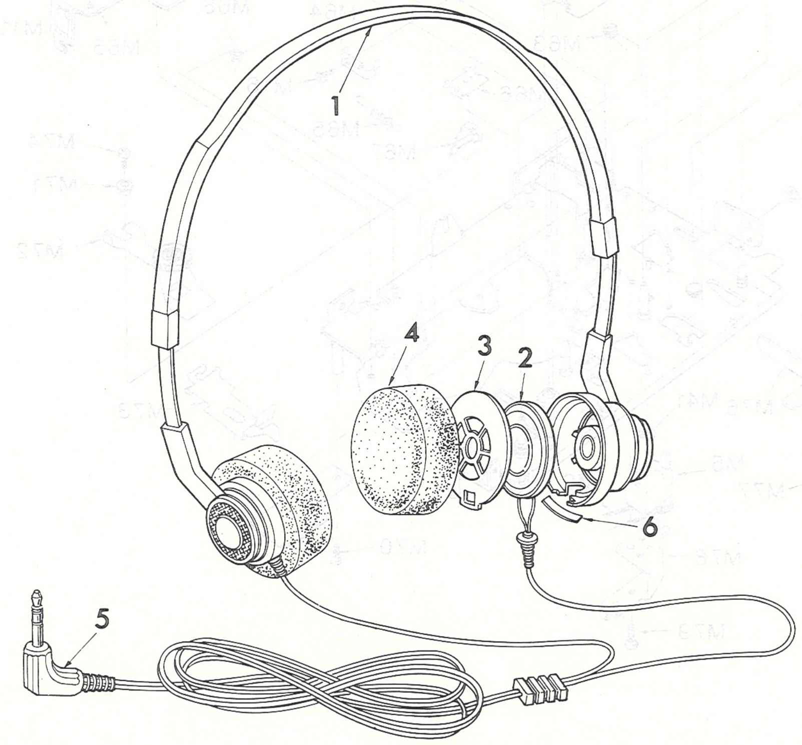


Fig. 29

■ REPLACEMENT PARTS LIST ....Model RX-F80

(RD82041987C3)

NOTES: 1. Important safety notice.
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
2. The S mark indicates service standard parts and may differ from production parts.

● TUNER/DECK PART

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
		MECHANICAL PARTS		
M1	RJH2T2Z	Record/Playback Head	1	
M2	RJH5S1Z	Erase Head	1	
M3	RFR8Z	Pinch Arm Ass'y	1	
M4	KCE16DA3A	Motor Ass'y (with Circuit Board)	1	
M5	RSE89Z	Counter	1	
M6	RFB17Z	Counter Belt	1	
M7	RFE53Z	Cover	1	
M8	RFE54Z	Reflecting Plate	1	
M9	RFX50Z	Spacer	1	
M10	RFN54Z	Circlip	4	
M11	RFJ18Z	Supply Reel Table	1	
M12	RFG24Z	Counter Gear	1	
M13	XUC12FT	Circlip	5	S
M14	RFG23Z	Idler A	1	
M15	XUC25FT	Circlip, Switch Operation Plate	7	S
M16	XSB2+2	Screw, Record/Playback Head M'tg	3	
M17	RFS190Z	Spring, Pinch Arm	1	
M18	RFN58Z	Washer, Record/Playback Head	1	
M19	RFD119Z	Head Base Ass'y	1	
M20	XSN2+7	Spring, Erase Head	1	
M21	XWE2X4BW	Washer, Erase Head	1	
M22	RFD120Z	Guide Holder Ass'y	1	
M23	RFS191Z	Spring, Tape Guide	1	
M24	RFY126Z	Erase Head Arm	1	
M25	XUC2FT	Circlip, Guide Holder M'tg	1	S
M26	RFS192Z	Spring, Erase Head Arm	1	
M27	RFY127Z	Inter Lock Connecting Plate	1	
M28	RFD122Z	Base Pressure	1	
M29	RFY129Z	Stopper	1	
M30	RFE55Z	Rec Selector	1	
M31	RFG25Z	PS Cam Ass'y	1	
M32	RFY125Z	Rec Connecting Plate	1	
M33	RFY133Z	PR Stopper	1	
M34	RFJ19Z	Take Up Reel Table	1	
M35	RFS199Z	Spring, Auto Stop	1	
M36	RFN56Z	Washer Auto Stop Gear	1	
M37	RFG26Z	Auto Stop Gear	1	
M38	RFG27Z	Sencer Cam	1	
M39	RFS200Z	Tension Spring	1	
M40	RFG28Z	Pressure Plate	1	
M41	XUC15FT	Circlip	7	S
M42	RFS201Z	Cam Spring	1	
M43	RFG29Z	Auto Stop Cam	1	
M44	RFG30Z	Operation Cam Ass'y	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
M45	RFS202Z	Reset Spring	1	
M46	RFY140Z	Reset Lever	1	
M47	RFD126Z	Lever Guide	1	
M48	RFG31Z	F Idler Ass'y	1	
M49	RFD127Z	Sub Chassis Ass'y	1	
M50	RFS203Z	Pressure Plate Spring	1	
M51	XSB2+4	Screw, Motor M'tg	3	
M52	RFI14Z	Motor Cushion	3	
M53	RFX53Z	Motor Washer	3	
M54	RFD123Z	Motor Holder	1	
M55	RFD124Z	Fitting Plate, Motor	1	
M56	RYT1XF80-1N	Stop Button Ass'y	1	
M57	RYT2XF80-1N	Pause Button Ass'y	1	
M58	RYT3XF80-1N	Rewind Button Ass'y	1	
M59	RYT4XF80-1N	FF Button Ass'y	1	
M60	RYT5XF80-1N	Playback Button Ass'y	1	
M61	RYT6XF80-1N	Recording Button Ass'y	1	
M62	RFS197Z	Spring, Head	1	
M63	RFS193Z	Spring, Stopper	1	
M64	RFS194Z	Spring, Recording Switch	1	
M65	RFS195Z	Spring, Recording Switch and etc	2	
M66	RFD121Z	Inter Lock Holder	1	
M67	RFY128Z	Inter Lock Plate	1	
M68	RFS196Z	Spring, P Idler	1	
M69	RFN55Z	Washer, Take Up Reel Table	1	
M70	XSN2+3	Screw, Motor Holder etc. M'tg	2	
M71	RFX52Z	Washer, P Idler Ass'y	1	
M72	RFK7Z	P Idler Ass'y	1	
M73	RFY131Z	Pause Lever B	1	
M74	XSN17+3FZ	Screw, P Idler	5	
M75	XSN17+5FZ	Screw, Cover M'tg	1	
M76	RFY139Z	Eject Lever Ass'y	1	
M77	RFS198Z	Spring, Inter Lever	1	
M78	RFD125Z	Bracket, Counter	1	
M79	XSB2+3	Screw, Counter M'tg	2	
M81	RFB18Z	Motor Belt	1	
M82	RFF14Z	Flywheel Ass'y	1	
M83	RFI15Z	Thrust Holder	1	
M84	RFD128Z	Flywheel Plate	1	
M85	RFS204Z	Spring, Idler Arm	1	
M86	RFY141Z	Idler Arm Ass'y	1	
M87	RFN57Z	Washer, P Idler	1	
M88	RFG32Z	Gear, Idler	1	
M89	RFS212Z	Spring, Arm Pressure	1	
M90	RFY142Z	Switch Operation Plate	1	
M91	RFY143Z	Pause Lever A	1	
M92	RFG33Z	Pause Cam	1	
M94	RFE57Z	Pause Rink	1	
M95	RFD129Z	Arm Pressure	1	
M96	RFY146Z	Switch Lever B	1	
M97	RFS207Z	Spring, Stop Lever	1	
M98	RFN60Z	Washer, Flywheel	1	
M99	RFY144Z	Auto Stop Lever	1	
M100	RFY149Z	FR Stopper Plate	1	
M101	RFS206Z	Spring, FR Stopper Plate	1	
M102	RFY145Z	R Gear Lever Ass'y	1	
M103	RFG34Z	R Idler B	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
M104	RFS208Z	Spring, Pause Lever	1	
M105	RFY148Z	Pause Lock Lever	1	
M106	RFY147Z	Switch Lever	1	
M107	RFS209Z	Spring, P Back	1	
M108	RFS210Z	Spring, FR Back	1	
M109	RFE58Z	Oil Stopper	1	
M110	RFX54Z	Circlip, Switch Lever	1	
M111	RFS211Z	Spring, Switch Lever	1	
M112	RFX51Z	Washer, Arm Pressure	1	
M113	RFN59Z	Washer, Motor Switch	1	
M114	RFN44Z	Washer, Idler Arm Ass'y	1	
M115	XSS17+4FZ	Screw, Cover M'tg	1	
M116	RFX55Z	Washer, Cover	1	
M117	RFN69Z	Washer, PR Stopper	1	
M118	RFS245Z	Spring, F Idler Ass'y	1	
M119	RFX59Z	Spacer, Sub Chassis	1	
		INTEGRATED CIRCUITS, TRANSISTORS AND DIODES		
IC1	AN7216	IC	1	
IC2	AN7220A	IC	1	
IC3	RVITK10280A	IC	1	
IC4,5	RVIUPC1217G	IC	2	
Q1	2SC1009F3	Transistor (Si)	1	
Q2	2SK160K5	Transistor (Si)	1	
Q3,4,13,14,17,18	2SC1623L6A	Transistor (Si)	6	
Q5	2SA812M5	Transistor (Si)	1	
Q6,15,19	2SD813R	Transistor (Si)	3	
Q7,8	2SC2001K2	Transistor (Si)	2	
Q9,11	2SD601R	Transistor (Si)	2	
Q10,12	2SD596DV3	Transistor (Si)	2	
Q16,20	2SB779R	Transistor (Si)	2	
D1	MA27C	Diode (Si)	1	S
D2,4,17,18	MA161	Diode (Si)	4	S
D3	RVDPG4632KY	Diode (Si)	1	
D5,6,8	RVDPR4632K	Diode (Si)	3	
D7	RVDKB262D	Diode (Si)	1	S
D9,10	MA27B2	Diode (Si)	2	S
		COILS AND TRANSFORMERS		
L1	RLO4N125	Coil, FM Tuning	1	
L2	RLO4Y19	Coil, FM Oscillator	1	
L3	RLF2Y17	Coil, AM Antenna	1	
L4	RLO2A3	Coil, AM Oscillator	1	
L7	RLO9A2	Coil, Bias Oscillator	1	
L8	RLQZA2R2K	Coil, Chock	1	
L9,10	RLQZ22G3	Coil, Chock	2	
L12,13	RLQZ12G1	Coil, Chock	2	
T1,3	RLI4A4	IFT, FM	2	
T2	RLI2A8	IFT, AM	1	S
		VARIABLE RESISTORS		
VR1	EVNA1AA00B53	Variable Resistor, Pre-set, 5kΩ (B)	1	
VR2	EVNA1AA00B14	Variable Resistor, Pre-set, 10kΩ (B)	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
VR3	EVUCAAT65A54	Variable Resistor, 50kΩ (A)	1	
VR4	EVLARAA00G54	Variable Resistor, 50kΩ (G)	1	
		VARIABLE CAPACITORS		
VC1	RCV4LC33	Tuning Capacitor	1	
CT1~4	RCVCTZ3110	Trimmer Capacitor	4	
		CERAMIC FILTERS		
CF1	RVFCFM2455B	Ceramic Filter	1	
CF2	RVFSFE107MAZ	Ceramic Filter	1	
		COMPONENT COMBINATION		
Z1	RXABPWB5	Component Combination	1	
		SWITCHES		
S1	RSS2A32Z	Switch, Band	1	
S2,3	RSS2B32Z	Switch, Tone & Mode	2	
S4,5	RSS2D11Z	Switch, Function & Tape	2	
S6,7	RSS2D12Z	Switch, Record/Playback	2	
S10	RFA25Z	Switch, Motor	1	
		JACKS		
J1	RJJ1D6Z	Jack, Headphone	1	
J2	RJJ1D9Z	Jack, Microphone (Left)	1	
J4	RJJ1D12Z	Jack, Microphone (Right)	1	
		RESISTORS (Value is in OHMS)		
R223	ERC18GK155	1.5 M 1/8W Solid	1	
R131,231	ERD10TJ1R0	1 " Carbon	2	S
R220	ERD10TJ123	12 k " "	1	S
R109	ERD10TJ273	27 k " "	1	S
R317	ERD10TJ4R7	4.7 " "	1	S
R217	ERD10TJ822	8.2 k " "	1	S
R25	ERD10TJ220	22 " "	1	S
R132,232	ERD10TJ473	47 k " "	2	S
R124	ERD10TJ820	82 " "	1	S
R121,221,303	RRD18XK100	10 " Chip	3	
R15,129,130,229,230	RRD18XK101	100 " "	5	
R13,23,27,30 44,301,312,315	RRD18XK102	1 k " "	8	
R28,41,316	RRD18XK103	10 k " "	3	
R3,46	RRD18XK104	100 k " "	2	
R120	RRD18XK123	12 k " "	1	
R11	RRD18XK151	150 " "	1	
R102,126,202,226	RRD18XK152	1.5 k " "	4	
R36,37,127,227	RRD18XK154	150 k " "	4	
R123	RRD18XK155	1.5 M " "	1	
R43,118,218	RRD18XK181	180 " "	3	
R20,107,119,207,219	RRD18XK183	18 k " "	5	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
R113,213	RRD18XK184	180 k 1/8W Chip	2	
R10,35,310	RRD18XK220	22 " "	3	
R2,8,29,304	RRD18XK221	220 " "	4	
R16,19,302,305	RRD18XK222	2.2 k " "	4	
R103,116,203,216	RRD18XK224	220 k " "	4	
R42	RRD18XK271	270 " "	1	
R24	RRD18XK272	2.7 k " "	1	
R111,209,211	RRD18XK273	27 k " "	3	
R17	RRD18XK330	33 " "	1	
R314	RRD18XK331	330 " "	1	
R122,222	RRD18XK332	3.3 k " "	2	
R5,40	RRD18XK333	33 k " "	2	
R22	RRD18XK334	330 k " "	1	
R308	RRD18XK390	39 " "	1	
R6,39	RRD18XK394	390 k " "	2	
R26	RRD18XK4R7	4.7 " "	1	
R1,14	RRD18XK470	47 " "	2	
R7,128,228	RRD18XK471	470 " "	3	
R106,114,125,206, 214,225,306,307	RRD18XK472	4.7 k " "	8	
R18,108,208	RRD18XK473	47 k " "	3	
R21	RRD18XK474	470 k " "	1	
R112,212	RRD18XK561	560 " "	2	
R31,32	RRD18XK562	5.6 k " "	2	
R12,110,210	RRD18XK681	680 " "	3	
R101,115, 201,215,311	RRD18XK682	6.8 k " "	5	
R105,205	RRD18XK685	6.8 M " "	2	
R224	RRD18XK820	82 " "	1	
R33	RRD18XK821	820 " "	1	
R117	RRD18XK822	8.2 k " "	1	
		CAPACITORS (Value is in MICRO FARADS except P.P=PICO FARADS)		
C11	ECCD1H220KC	22 P 50V Ceramic	1	
C35	RCQP2A102JZ	1000 P 100V Polyester	1	
C303	RCQP2A361JZ	360 P " "	1	
C304	RCQP2A472JZ	4700 P " "	1	
C108,208,317	ECFVD103MD	0.01 25V Semi-Conductor	3	
C111,211	ECUX1H152MD	0.0015 50V Chip	2	
C104,204	ECUX1H181KD	180 P " "	2	
C122,222,310,311	ECUX1H222MD	0.0022 " "	4	
C4	ECUX1H331KD	330 P " "	1	
C45	ECUX1H333ZF	0.033 " "	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
C22,301,302	ECUX1H473MD	0.047 50V Chip	3	
C13,18	ECUX1H050DC	5 P " "	2	
C10	ECUX1H070DC	7 P " "	1	
C1	ECUX1H101KD	100 P " "	1	
C109,127,209,227	ECUX1H102MD	0.001 " "	4	
C3,6,7,29, 34,43,44,128, 130,228,230,306	ECUX1H103MD	0.01 " "	12	
C2,9,16,17,307	ECUX1H103ZF	0.01 " "	5	
C5	ECUX1H120KC	12 P " "	1	
C12	ECUX1H150KC	15 P " "	1	
C14	ECUX1H153MD	0.015 " "	1	
C21,26,27,112, 125,212,225	ECUX1H223MD	0.022 " "	7	
C33	ECUX1H331KD	330 P " "	1	
C23	ECUX1H470KC	47 P " "	1	
C19	ECUX1H471MD	470 P " "	1	
C121,221,312	ECUX1H472MD	0.0047 " "	3	
C30,131,132, 231,232,318	ECEA0GK221	220 4V Electrolytic	6	
C20,129,229	ECEA0GK470	47 " "	3	
C24,39,49,308,313	ECEA0JK101	100 6.3V "	5	
C102,117,202,217	ECEA0JK220	22 6.3V "	4	
C41,315,316	ECEA0JSS471	470 " "	3	
C25,40,101,103, 106,110,201, 203,206,210	ECEA1CK100	10 16V "	10	
C47,105,113,114, 205,213,214	ECEA1EK4R7	4.7 25V "	7	
C8,28,119,219	ECEA1HK0R1	0.1 50V "	4	
C31,37,116,120, 123,124,216, 220,223,224	ECEA1HK010	1 " "	10	
C32,38,126,226	ECEA1HK2R2	2.2 " "	4	
C36,107,207	ECEA1HK3R3	3.3 " "	3	
C118,218	ECSF0FM475	4.7M 3.15V "	2	
		CABINET PARTS		
K1	RYMXF80-1X8	Front Cabinet Ass'y, Pearl Silver	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
K1	RYMXF80-1X91	Front Cabinet Ass'y, Silver	1	
K1-1	RJC935Z	Terminal, Battery +, - Side	1	
K2	RYFXF80-1X8	Rear Cabinet Ass'y, Pearl Silver	1	
K2	RYFXF80-1X92	Rear Cabinet Ass'y, Silver	1	
K3	RYNXF80-1N8	Battery Cover Ass'y, Pearl Silver	1	
K3	RYNXF80-1N91	Battery Cover Ass'y, Silver	1	
K4	RYQXF80-1X	Cassette Panel Ass'y, Pearl Silver	1	
K4	RYQXF80-1X1	Cassette Panel Ass'y, Silver	1	
K5	RBD152Z	Knob	5	
K6	RBH16Z	Hinge	1	
K7	RGK1049Z	Indicating Plate, Volume, Pearl Silver	1	
K7	RGK1049Z2	Indicating Plate, Volume, Silver	1	
K8	XSHR2+3FN	Screw, Hinge M'tg	2	
K9	XSHR2+8FN	Screw, Cabinet M'tg	5	
K10	XTB2+8CFN	Screw, Cabinet M'tg	1	
K11	XQH17+C4FN	Screw, Cabinet M'tg	2	
		ELECTRICAL PARTS		
E1	RZAXF80-1N	Dial Chassis Ass'y	1	
E2	RBT135Z	Knob, Tuning	1	
E3	RDD182Z	Drum, Dial	1	
E4	RDP827Z	Pointer, Dial	1	
E5	RDS2053Z	Spring, Dial	1	
E6	RDZ03Y	Cord, Dial	1 ROLL	
E7	WM063X	Microphone	1	
E8	RJT760Z	Terminal, Speaker & Amp. Block Connector	2	
E9	RJC364Z	Terminal, Battery + Side	1	
E10	RJC741Z	Spring, Battery - Side	1	
E11	RUA499Z	Case, Battery, Pearl Silver	1	
E11	RUA499Z2	Case, Battery, Silver	1	
E12	RUB254Z	Lever, Switch, Pearl Silver	1	
E12	RUB254Z2	Lever, Switch, Silver	1	
E13	RUB253Z	Holder, Lever, Pearl Silver	1	
E13	RUB253Z2	Holder, Lever, Silver	1	
E14	RHS11A	Ribbon, Battery	1	
E15	RHG2019Z	Cover, Microphone	1	
E16	RJE122Z	Lead Wire	1	
E17	RMA5092Z	Holder, Core Antenna	2	
E18	RMP182Z	Holder, LED	2	
E19	RMC607Z	Shield Cover, IC2	1	
E20	RBT145Z	Knob, Volume	1	
E21	XSHR17+3	Screw, Volume Knob M'tg	1	
E22	XSHR2+4FN	Screw, Circuit Board M'tg	2	
E23	XTNR2+4CFN	Screw, Dial Chassis etc. M'tg	7	
E24	XNG2EBW	Nut, Tuning Shaft M'tg	1	S
E25	XSHR17+2FZ	Screw, Tuning Capacitor & Drum M'tg	3	

● AMP/SPEAKER PART

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
		INTEGRATED CIRCUITS, TRANSISTORS AND DIODES		
IC6	RVIBA6133	IC	1	
IC7	RVILA4183	IC	1	
Q21~28	2SC945-Q	Transistor (Si)	7	S
Q24	2SD313E	Transistor (Si)	1	
D11	RVDRD4R7EB2	Diode (Si)	1	
D12	LN222RP	LED (Ga)	1	
D13~16	SM112	Diode (Si)	4	S
		TRANSFORMER		
T101	RLT5Z3Z1A	Power Transformer	1	⚠
		VARIABLE RESISTORS		
VR5,6	EWCSUAF15A54	Variable Resistor, Pre-Set, 50kΩ (A)	2	
VR7	EWHGHAF15G54	Variable Resistor, Pre-Set, 50kΩ (G)	1	
VR8	EWCSVAF15A54	Variable Resistor, Pre-Set, 50kΩ (A)	1	
		SPEAKER		
	EAS10P81GS	Speaker, 10cm (4"), 3Ω, PM Dynamic	2	
		SWITCHES		
S8,9	RST2B29Z	Switch, Ambience & Power	2	
S12	RSR4A06Y	Switch, Voltage Selector	1	⚠
		JACKS		
J4	RJJ1D11Z	Jack, Headphone	1	
J5,6	RJJ19Y	Jack, Ext. Speaker	2	
J7	RJJ2K1Z	Jack, Line-out	1	
J8,9	QJS0328	Jack, AC/DC In	1	⚠
		RESISTORS (Value is in OHMS)		
R163,263	ERD25FJ1R0	1 1/4W Carbon	2	S
R365	ERD25FJ100	10 " "	1	S
R161,261	ERD25FJ101	100 " "	2	S
R156,157,256,257, 352,353,355	ERD25FJ102	1 k " "	7	S
R160,260	ERD25FJ103	10 k " "	2	S
R158,159, 258,259,359	ERD25FJ123	12 k " "	5	S
R162,165,262,265	ERD25FJ153	15 k " "	4	S
R362	ERD25FJ220	22 " "	1	S
R152,252	ERD25FJ222	2.2 k " "	2	S
R357	ERD25FJ271	270 " "	1	S
R356	ERD25FJ331	330 " "	1	S
R354	ERD25TJ335	3.3 M " "	1	S
R166,266	ERD25FJ392	3.9 k " "	2	S
R167,267,351	ERD25FJ470	47 " "	3	S

Q4

C	3.02V
B	0 V
E	0 V

Q2

	AM
D	1 V
G	0 V
S	0.04V

IC3

	FM		FM		FM		FM
1	2.88V	6	1.01V	11	0.18V	16	1.3V
2	2.15V	7	0.3V	12	0V	17	1.3V
3	2.05V	8	0.2V	13	1.29V	18	1.3V
4	1.6V	9	0V	14	1.3V	19	0V
5	1.06V	10	1.65V	15	1.39V	20	2.2V

IC4,5

	REC		REC		REC		REC
1	1.48V	6	0.01V	11	0V	16	2.72V
2	1.48V	7	1.48V	12	0.92V	17	2.71V
3	1.56V	8	1.44V	13	0.98V	18	1.33V
4	1.49V	9	1.46V	14	3V	19	1.49V
5	1.49V	10	0.13V	15	0.07V	20	0V

IC1

	FM		FM
1	2.15V	5	0V
2	2.85V	6	2.9V
3	2.85V	7	2.85V
4	2.85V	8	2.18V

Q5

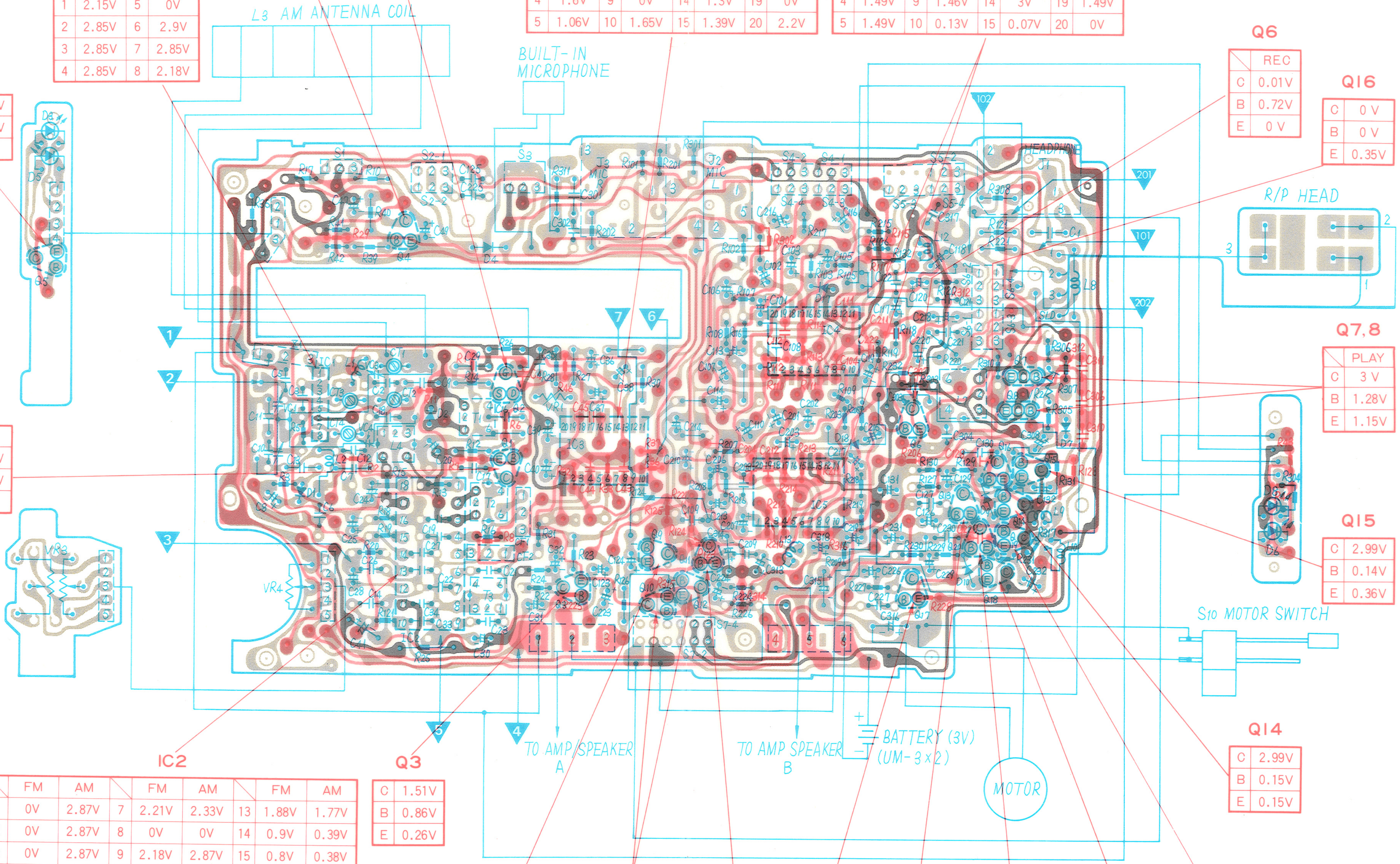
C	0.68V
B	3.02V
E	3 V

Q6

	REC
C	0.01V
B	0.72V
E	0 V

Q16

C	0 V
B	0 V
E	0.35V


L3 AM ANTENNA COIL
BUILT-IN MICROPHONE
HEADPHONE
R/P HEAD
1
2
3
101
102
201
202
1
2
3
4
5
6
7
VR3
VR4
S10 MOTOR SWITCH
TO AMP SPEAKER A
TO AMP SPEAKER B
BATTERY (3V) (UM-3 x 2)
MOTOR

Q7,8

	PLAY
C	3 V
B	1.28V
E	1.15V

Q1

	FM
C	2.77V
B	0.66V
E	0 V

Q15

C	2.99V
B	0.14V
E	0.36V

Q14

C	2.99V
B	0.15V
E	0.15V

IC2

	FM	AM		FM	AM		FM	AM
1	0V	2.87V	7	2.21V	2.33V	13	1.88V	1.77V
2	0V	2.87V	8	0V	0V	14	0.9V	0.39V
3	0V	2.87V	9	2.18V	2.87V	15	0.8V	0.38V
4	2.21V	2.33V	10	2.18V	2.5V	16	0V	0V
5	2.21V	2.34V	11	2.72V	2.88V	16	0V	2.84V
6	2.21V	2.34V	12	2V	2.14V	18	0.01V	0.75V

Q3

C	1.51V
B	0.86V
E	0.26V

Q9

C	1.12V
B	0.67V
E	0.08V

Q10,12

	REC
C	0 V
B	0.7V
E	0 V

Q11

C	1.12V
B	0.67V
E	0.08V

Q17

C	0.16V
B	0.4V
E	0 V

Q13

C	0.16V
B	0.4V
E	0 V

Q20

C	0 V
B	0 V
E	0.35V

Q18

C	2.99V
B	0.15V
E	0.15V

Q19

C	2.99V
B	0.14V
E	0.36V

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
R154,254	ERD25FJ472	4.7 k 1/4W Carbon	2	S
R358	ERD25FJ562	5.6 k " "	1	S
R153,253	ERD25FJ681	680 " "	2	S
R151,251	ERD25TJ684	680 k " "	2	S
R155,255	ERD25FJ822	8.2 k " "	2	S
R363,364	ERD25FJ222	2.2 k " "	2	S
R361	ERX1ANJP1R0	1 1W Metal	1	
		CAPACITORS (Value is in MICRO FARADS except P.P=PICO FARADS)		
C171,172,271,272	ECCD1H331K	330 P 50V Ceramic	4	
C364	ECCD1H181K	180 P " "	1	
C170,270	ECKD1H102MD	0.001 " "	2	
C360∿363	ECKD1H103ZF	0.01 " "	4	
C164,264	ECKD1H681KB	680 P " "	2	
C154,254	ECKD1H682MD	0.0068 " "	2	
C163,263	ECKD1H222MD	0.0022 " "	2	
C167,267	ECQG05224JZ	0.22 " Polyester	2	
C353	ECFVD223MD	0.022 25V Semi-Conductor	1	
C153,253	ECFVD333MD	0.033 " "	2	
C155,255	ECFVD473MD	0.047 " "	2	
C169,269	ECFVD682KA	0.0068 " "	2	
C159,259	ECFVD683MD	0.068 " "	2	
C366	ECFVD103MD	0.01 " "	1	
C168,268	ECEA0JS102	1000 6.3V Electrolytic	2	S
C356,357	ECEA0JS471	470 " "	2	S
C351	ECEA1ASS471	470 10V "	1	
C165,166,265,266	ECEA1AS101	100 " "	4	S
C352,355,365	ECEA1CS221	220 16V "	3	S
C359	ECEA1CS332	3300 " "	1	S
C367	ECEA50Z3R3	3.3 50V "	1	S
C152,156,252,256	ECEA1HSR33	0.33 " "	4	
C158,258	ECEA1HS0R1	0.1 " "	2	
C151,157,161,251,257,261,354	ECEA50Z1	1 " "	7	S
C160,260	ECBT1H332MM	0.0033 " Ceramic	2	
		CABINET PARTS		
K12	RYMXF80-2X8	Front Cabinet Ass'y, Pearl Silver	1	
K12	RYMXF80-2X91	Front Cabinet Ass'y, Silver	1	
K12-1	RKX244Z	Arm, Handle	2	
K12-2	RKH117Z	Handle, Pearl Silver	1	
K12-2	RKH117Z2	Handle, Silver	1	
K12-3	RKT130Z	Stopper, Arm	2	
K12-4	RKX251Z	Washer, Arm	2	
K12-5	XTC3+8CFN	Screw, Handle M'tg	2	
K13	RYFXF80-2X8	Rear Cabinet Ass'y, Pearl Silver	1	
K13	RYFXF80-2X7	Rear Cabinet Ass'y, Silver	1	
K13-1	RJC507Z	Spring, Battery - Side	1	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
K13-2	RJT398Y	Connecting Pipe	1	
K13-3	RJC205Z	Terminal, Battery + Side	1	
K13-4	RJC946Z	Terminal, Battery +, - Side	1	
K14	RYNXF80-2N8	Battery Cover Ass'y, Pearl Silver	1	
K14	RYNXF80-2X7	Battery Cover Ass'y, Silver	1	
K15	XEAQCR228FAK	Telescopic Antenna	1	
K16	RJT698Z	Terminal, Telescopic Antenna	1	
K17	RGM226Z	Metal Grille, Speaker	2	
K18	RBS191Z	Knob, Power, Ambience	2	
K19	RBS193Y	Knob, Bass, Treble	4	
K20	RUB255Z	Lever, Power Source Selector, Pearl Silver	1	
K20	RUB255Z2	Lever, Power Source Selector, Silver	1	
K21	RUB256Z	Lever, Stopper	1	
K22	RDS5113Z	Spring, Power Source Selector, Lever	1	
K23	RDS5112Z	Spring, Lever	1	
K24	RKE402Z	Cover, Terminal, Pearl Silver	1	
K24	RKE402Z2	Cover, Terminal, Silver	1	
K25	RUS465Z	Spring, Cover	2	
K26	RHR1160Z	Stopper, Pearl Silver	1	
K26	RHR1160Z2	Stopper, Silver	1	
K27	RDS3030Z	Spring, Stopper	1	
K28	RHM152Z	Spacer, Stopper	4	
K29	RDS3041Z	Spring, Button	1	
K30	RBC263W	Button	1	
K31	XSN3+12S	Screw, Telescopic Antenna M'tg	1	S
K32	XWA3B	Washer	1	S
K33	XTV3+8BFN	Screw, Cover M'tg	2	S
K34	XTV3+25C	Screw, Stopper M'tg	1	
K35	XTW3+10Q	Screw, Lever M'tg	5	
K36	XTB3+12CFN	Screw, Cabinet M'tg	6	
K37	XWT3	Washer	2	S
K38	XWG3	Washer	1	S
		ELECTRICAL PARTS		
E27	RUV387Z	Cover, Voltage Selector	1	⚠
E28	RJS4L1Z	Socket, 4 Pin	1	
E29	RJT462Z	Terminal, Socket	4	
E30	RUV603Z	Cover, AC IN Jack	1	⚠
E31	RUV628Z	Cover, Switch	2	
E32	RUV644Z	Jack Board, Pearl Silver	1	
E32	RUV644Z2	Jack Board, Silver	1	
E33	RMS12B	Bracket, Speaker	7	
E34	RGX1251Z	Ornament, LED	1	
E35	RJS2L3Z	Socket, 2 Pin	1	
E36	RJT707Z	Terminal, Socket	2	
E37	RJP2G4Z	Plug, 2 Pin	1	
E38	RJP4G1Z	Plug, 4 Pin	1	
E39	RJT761Z	Terminal, Tuner Connection	2	
E40	RMY170Z	Heat Sink, IC7	1	
E41	RMY75Z	Heat Sink, Q24	1	
E42	XTV3+10G	Screw, Voltage Selector & Speaker M'tg	10	

Ref. No.	Part No.	Part Name & Description	Per Set	Remarks
E43	XTV3+10GR	Red Screw, Circuit Board M'tg	8	
E44	XSN3+8S	Screw, Transformer M'tg	4	S
E45	XWG3	Washer	4	S
		ACCESSORIES		
	RD9217XA	Headphone	1	
	RJN33Z	Cassette Tape	1	
	RJA21Z	Power Cord, AC	1	⚠
	RJP120ZS	Plug, Power Cord	1	⚠
	RJP2E1Z	Plug, Headphone Branching	1	
	RJP267Z	Cord, Line-in	1	
	RQE13Z	Caution Tag, Power Cord	1	
	RQC2003Z	Belt, Case	1	
	RQD174Y	Case, Cabinet	1	
		PACKING MATERIALS		
	RPP466Z	Polyethylene Cover, Tuner/Deck	1	
	XZB60X50A04	Polyethylene Cover, Amp./Speaker	1	S
	RPN9402Z	Pad Complete	1	
	RPK1298Z	Gift Box	1	
		PRINTED MATERIAL		
	RQX6853Z	Instruction Book	1	
		HEADPHONES		
1	EAHMHH028AD	Head Band Assembly	1	
2	EAHEAS2P03A	Speaker	2	
3	EAHMP016A	Buffle	2	
4	EAHME020A	Ear Pad	2	
5	EAHMN038	Input Cord	1	
6	EAHMZ231	Label	2	

ORDER NO. RD82061997A4

Service Manual

Radio Cassette

RX-F80

FM-AM STEREO RADIO
CASSETTE RECORDER

Please use this manual together with the service manual for model No. RX-F80, order No. RD82041987C3

CHANGES

■ REPLACEMENT PARTS LIST

Ref. No.	Change of Part No.		Description	Per Set	Remarks	Price
	RX-F80 →	RX-F80 (RD82061997A4)				
K4	RYQXF80-1X	RYQXF80-1F	Cassette Panel Ass'y, Pearl Silver	1		
K4	RYQXF80-1X1	RYQXF80-1F1	Cassette Panel Ass'y, Silver	1		
	RJP120ZS	———	Remove			
	RJN33Z	———	Remove			

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